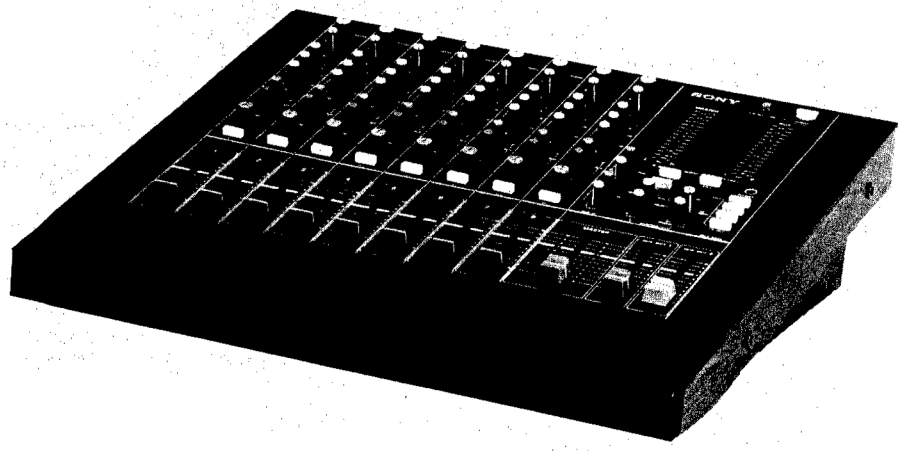
MX-P21

US Model
Canadian Model
AEP Model
UK Model



Revised-2

AUDIO MIXER

SPECIFICATIONS

Power requirements	
AC	US and Canadian models: 120 V ac, 60 Hz UK, AEP models: 110–120 V or 220–240 V ac (adjustable by Sony personnel), 50/60 Hz
DC	12 V car battery by using the optional DCC-16A, DCC-16AE, DCC-16AW car battery cord
Power consumption	AC 28 W DC 12 V, 1.8 A
Operating temperature	0°C to 50°C (32°F to 122°F)
Storage temperature	−20°C to +60°C (−4°F to +140°F)
Dimensions	Approx. 482 × 130 × 448 mm (w/h/d) (19 × 5⅛ × 17¾ inches) excl. projecting parts
Weight	Approx. 12.6 kg (27 lbs 13 oz)
Supplied accessories	AC power cord (1) AC plug adaptor (1) (except US, Canadian and UK models.)

— Continued on page 2 —

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

MICROFILM

SONY®
SERVICE MANUAL

ACC

Inputs (0 dBs = 0.775 V)

Connector	Channels	Reference input level	Maximum input level	Input impedance	Balanced or unbalanced
MIC INPUT (CANNON XLR-3-31 type)	8	−60 dBs	0 dBs	less than 600 ohms	balanced
LINE INPUT (phono jack)	8	−10 dBs	15 dBs	50 kilohms	unbalanced
PHONO INPUT (phono jack)	6	−44 dBs (1 kHz)	−14 dBs (1 kHz)	50 kilohms	unbalanced
SUB INPUT (phono jack)	2	−10 dBs	15 dBs	10 kilohms	unbalanced
EXT MON INPUT (phono jack)	2 (stereo × 1)	−10 dBs	15 dBs	10 kilohms	unbalanced

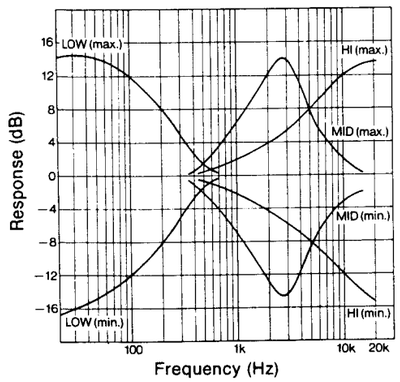
Outputs

Connector	Channels	Reference output level	Maximum output level	Suitable load impedance	Balanced or unbalanced
LINE OUT (CANNON XLR-3-32 type)	2 (stereo × 1)	4 dBs	24 dBs	600 ohms	balanced
LINE (phono jack)	2 (stereo × 1)	−5 dBs	15 dBs	more than 10 kilohms	unbalanced
AUX (phono jack)	2 (monaural)	−5 dBs	15 dBs	more than 10 kilohms	unbalanced
MONITOR (phono jack)	2 (stereo × 1)	−5 dBs	15 dBs	more than 10 kilohms	unbalanced
PHONES (phono jack)	2 (stereo × 1)	—	50 mW (8 ohms)	more than 8 ohms	unbalanced
TB (phono jack)	1 (monaural)	−5 dBs	15 dBs	more than 10 kilohms	unbalanced

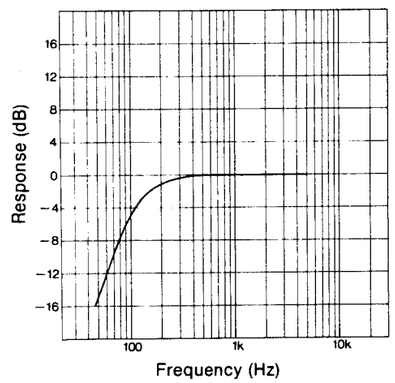
Frequency response 20 – 20,000 Hz ($^{+0.5}_{-1.5}$ dB at 1 kHz)
Harmonic distortion (20 – 20,000 Hz)
Less than 0.3% under maximum input/output level
Equivalent input noise
Microphone inputs (input 150 ohms terminated, 20 – 20,000 Hz)
Less than −126 dBs
Line inputs (input short-circuited, 20 – 20,000 Hz)
Less than −80 dBs
Inherent noise
Master fader at 0 Less than −85 dBs
Channel fader at 0 Less than −70 dBs
Cross-talk (at 1 kHz) More than 60 dB
Built-in oscillator 1 kHz sine-wave
Equalization characteristics
(See "OPERATING CURVES" on page 3.)
Low-cut filter
Cut-off frequency 120 Hz −3 dB
Attenuation 12 dB/octave
(See "OPERATING CURVES" on page 3.)

OPERATING CURVES

Equalization characteristics

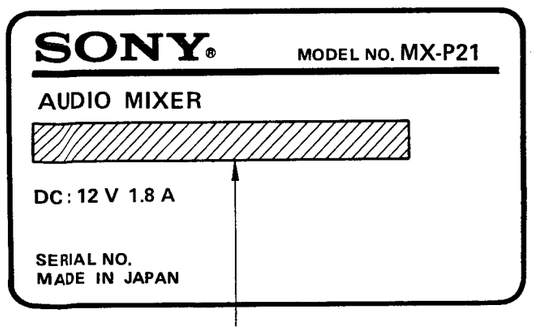


Low-cut filter characteristics



MODEL IDENTIFICATION

– Specification Labels –



US, Canadian model: AC: 120 V 60 Hz 28 W
AEP, UK model: AC: 220 – 240 V ~50/60 Hz 28 W

FEATURES

The Sony MX-P21 has been designed to be multi-purpose audio mixer capable of performing all the essential functions required for a public address system, radio and TV broadcasting, studio recording and tape editing.

8 channel inputs with various adjustment possibilities
Each input can be independently adjusted to suit the connected equipment and to provide excellent mixing results from its own low-cut filter and equalization circuits. With the PAN POT (panoramic potentiometer) function, each input sound image can be positioned to the desired spot between the L and R stereo output channels.

Auxiliary inputs and outputs for additional mixing effects
By connecting an echo machine or a reverberation unit, additionally desired sound effects may be easily obtained.
One of the outputs can be used to supply signals to a fold-back speaker for players on the stage.

Monitoring of various signals
Each line and auxiliary output signal can be monitored either with headphones or speakers for accurate mixing. In addition, the PFL (pre-fader listening) function permits direct monitoring of each of the original incoming signals.

Talk-back function indispensable for studio use
The built-in microphone enables the operator to directly communicate with those in the studio.

Easy rack mounting
The table-top design can be easily converted for rack-mounting in a 19-inch standard rack or in specified racks designed for Sony U-matic video systems.

2-way powering for the unit plus microphones
The built-in DC-DC converter enables stable operation from either a 12 V car battery or an ac power supply, or both. Furthermore, the unit can supply 48 V dc to each of the connected phantom powered condenser microphones.

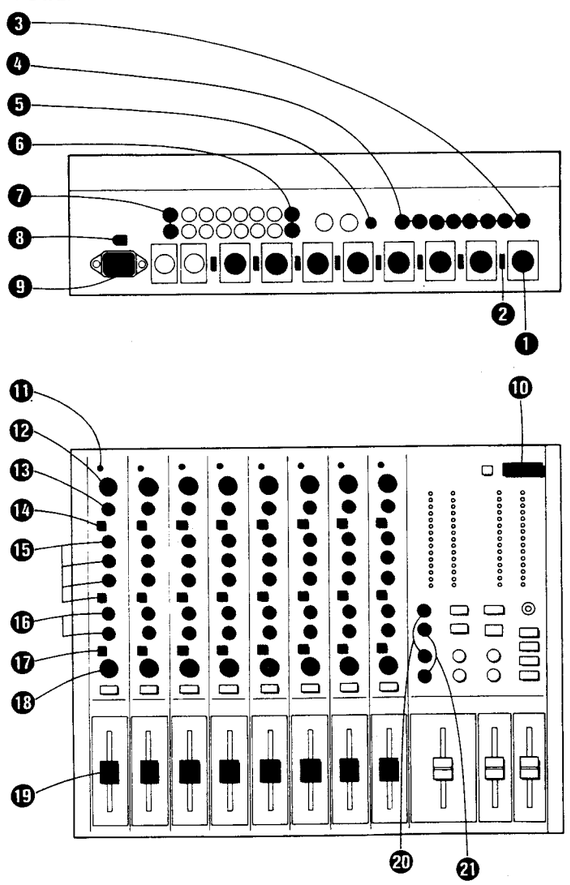
Supplementary functions for full creative flexibility
—Built-in oscillator to supply test and balancing signals.
—Through function which allows input signals to bypass the mixing circuits for direct output.
—Cascade connectors to multiply input channels.

SECTION 1
OUTLINE

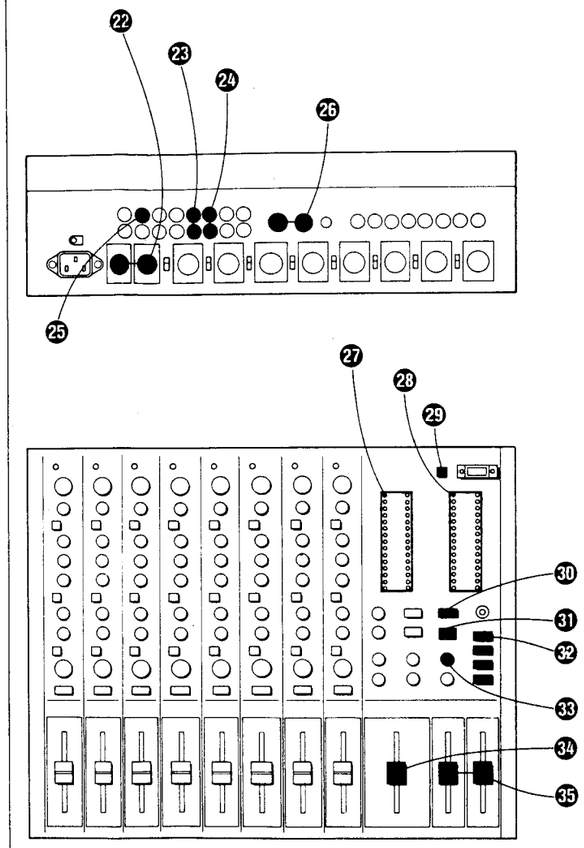
1-1. LOCATION OF PARTS AND CONTROLS

Note: Negative numbers coincide with those on pages 5 through 7.

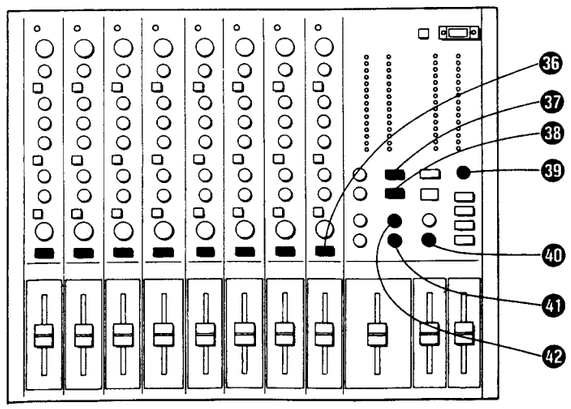
POWER AND INPUT SECTIONS

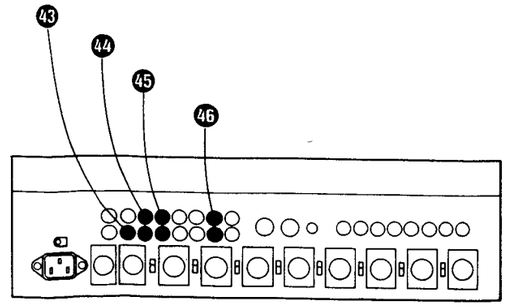


OUTPUT SECTION



MONITOR SECTION





PRECAUTIONS

On safety

- Check that the operating voltage of your unit is identical to the voltage of your local power supply.
  For car battery operation, use the car battery cord recommended for this set.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it is not to be used for an extended period of time. To disconnect the cord, pull it out by grasping the plug. Never pull the cord itself.

On installation

Do not install the unit in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.

On operation

When the unit is not used, turn the power off to conserve energy and to extend the useful life of your unit.

On cleaning the cabinet

Clean the cabinet, panel and controls with a soft cloth lightly moistened with mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzine.

On repacking

Do not throw away the carton and the packing material. They make an ideal container to transport the unit in. When shipping the unit for repair work or to another location, repack it as it was originally packed at the factory.

If you have any questions about this unit, contact your Sony dealer.

OPERATING VOLTAGE

Before connecting the unit to an ac power source, refer to the serial plate and check that the operating voltage of your unit is the same as the local power line voltage.
The USA and Canadian models operate on 120 V ac.
The models for other countries operate on either 110–120 V or 220–240 V ac. The voltage adaptation must be performed by authorized Sony personnel.

NOTICE FOR THE CUSTOMERS IN THE UNITED KINGDOM

IMPORTANT

The wires in the mains lead are coloured in accordance with the following code:

Blue: Neutral
Brown: Live

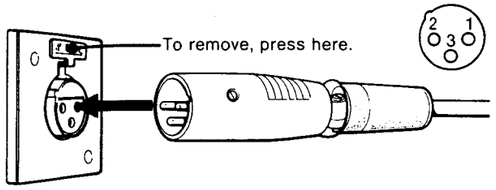
As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

FUNCTION OF PARTS AND CONTROLS

POWER AND INPUT SECTIONS

❶ MIC INPUT 1–8 (microphone input) connectors
(CANNON XLR-3-31 type)
For microphones.

Pin arrangement
1: GND 2: hot 3: cold



❷ +48 V (microphone power supply) switches
Set to ON to supply 48 V dc, 7 mA (max) to phantom powered condenser microphones connected to the corresponding MIC INPUT connectors.

❸ LINE/PHONO INPUT 1–6 jacks (phono jacks)
Accept line-out signals from tape decks and amplifiers, or phonoout signals from record players equipped with moving-magnet type cartridges.

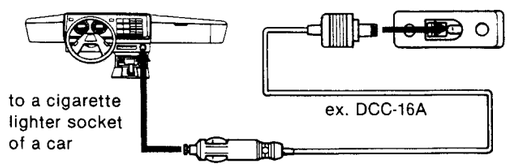
❹ LINE INPUT 7/8 jacks (phono jacks)
Accept line-out signals from a tape deck or an amplifier.

❺ Ground terminal
When connected audio equippment such as a record player requires earth connection to reduce hum or other undesirable noise, connect its ground wire to this terminal.

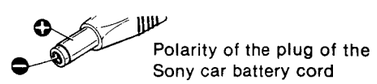
❻ SUB INPUT jacks (phono jacks)
Accept auxiliary input signals such as those from an echo machine.

❼ FADER REMOTE 3/4 jacks (phono jacks)
By sliding up the channel faders of channel 3 and 4 from the minimum (0) position, these jacks will be short-circuited to switch on audio equipment connected via an appropriate interface unit.
The permitted current to be supplied to these jacks is max. 2 mA.

❽ DC IN +12 V (DC power supply) jack
To power this unit from a 12 V car battery. For connection, use the optional DCC-16A, DCC-16AE or DCC-16AW car battery cord.



Note: Use only the recommended car battery cord manufactured by Sony. Polarity of the plugs of other manufacturers may be different.



Polarity of the plug of the Sony car battery cord

❾ AC IN (AC power supply) socket
Connect with the supplied ac power cord to an ac power source. The USA and Canadian models are equipped with a 3-pin socket and the models for other countries are equipped with a 2-pin socket.
For the customers of the model supplied with the ac plug adaptor:
If the plug of the ac power cord does not match with the outlet, use the ac plug adaptor.

❿ POWER switch and pilot lamps
Depress the switch to turn on the unit.
When ac power is supplied, the AC pilot lamp will light.
When dc power is supplied, the DC lamp will light.
- If both ac and dc power supplies are connected, the both the AC and DC lamps will light.

⓫ PEAK indicators
Light up if the corresponding input signals level is within 5 dB of the clipping level.

⓬ INPUT SELECT switches
Select the input sources. The switches of channels 1 to 6 have three positions; LINE, MIC, PHONO and the switches of channels 7 and 8 have two; LINE, MIC.

⓭ MIC (microphone gain) controls
Reduce excessive microphone input level and prevent distortion. Adjust these controls so that the proper level can be obtained when each corresponding fader is set at "7".
Turn the controls counterclockwise when the corresponding PEAK indicators light up.

⓮ LCF (low-cut filter) switches
When the switches are depressed, input signals below 120 Hz are attenuated at a 12 dB/octave rate.

⓯ EQ (equalization) switches and controls
When the EQ switches are depressed, the input signals pass through the equalizer circuits. Adjust the controls to equalize the sound sources. The HI controls are for the high-frequency range around 10 kHz, the MID controls are for the middle-frequency range around 2.8 kHz and the LOW controls are for the low-frequency range around 100 Hz.

⓰ AUX 1/2 (auxiliary output level) controls
Ajust the signals level of each channel going to the auxiliary outputs 1 or 2 respectively.

⓱ PRE (pre-fader) switches
When the switches are depressed, the pre-fader signals of the corresponding channels can be fed to the auxiliary output 1. These are especially useful when the auxiliary output 1 is used for a fold-back speaker.

⓲ PAN POT knobs
These permit panning of the incoming signals between the output L and R channels. The center click positions place the sound images in the center.

The image moves to the left.

The image moves to the right.

⓳ Channel faders
Adjust the signal level of each channel going to the line outputs for proper balance. The position 7 (the thick line) indicates the reference level.

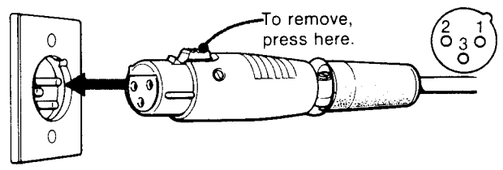
⓴ SUB IN 1/2 LEVEL controls
Adjust the signal levels from SUB INPUT 1 or 2 jack ❻ respectively.

㉑ SUB IN 1/2 PAN knobs
Position the sound image of SUB INPUT 1 or 2 in the desired place between the output L and R channels.

OUTPUT SECTION

㉒ LINE OUT L/R (line output) connectors
(CANNON XLR-3-32 type)
Feed out the mixed line output signals (balanced).

Pin arrangement
1: GND 2: hot 3: cold



㉓ LINE L/R (line output) jacks (phono jacks)
Feed out the same signals (unbalanced, however) as the CANNON type connectors ㉒.

㉔ AUX 1/2 (auxiliary output) jacks (phono jacks)
Each supplies monaural output signals independently of the line outputs ㉒㉓. Connect to an echo machine or a power amplifier to drive a fold-back speaker.

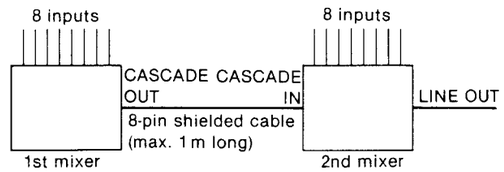
㉕ TB (talk-back output) jack (phono jack)
While the TB OUT button of the TALK BACK buttons ㉜ is depressed, the signal from the built-in microphone is fed to this jack.

㉖ CASCADE IN/OUT connectors (8-pin DIN connectors)
For connecting two or more MX-P21 units in parallel to increase the number of inputs.

Pin arrangement

1: AUX-1
2: GND
3: AUX-2
4: PFL audio
5: PFL control
6: LINE L
7: LINE R
8: GND

Connection



㉗ **MASTER L/R VU meters**
Indicate the L and R channel line output levels respectively. (When the EXT MON switch ㊲ is depressed, external signal levels will be indicated.)

㉘ **AUX 1/2 VU meters**
Indicate the auxiliary output levels.

㉙ **7-8 THROUGH switch**
When this switch is depressed, the line input signals from channel 7 and 8 can be directly output from the LINE jacks ㉓ without passing through the mixing circuits, even if the power of the mixer is turned off.
Use this switch for copying tapes.

㉚ **OSC (oscillator) switch**
When this switch is depressed, a 1 kHz sine-wave is fed to the line outputs ㉒㉓. The level can be adjusted with the MASTER fader ㉞.

㉛ **MIC (built-in microphone)**
To send information from the mixer. The outputs to send can be selected with the TALK BACK buttons ㉜.

㉜ **TALK BACK buttons**
Select the outputs for the built-in microphone.
MASTER: line outputs ㉒㉓
AUX-1 / AUX-2 } corresponding auxiliary outputs ㉔
TB OUT: TB output jack ㉕

㉝ **TB LEVEL (talk-back level) control**
Adjusts the built-in microphone sound level.

㉞ **MASTER fader**
Adjusts the overall signal level output from the LINE OUT connectors ㉒ and LINE jacks ㉓.
The reference level is indicated by a thick line.

㉟ **AUX OUT 1/2 (auxiliary output) faders**
Adjust the output levels of the AUX 1 and AUX 2 jacks ㉔ respectively.

MONITOR SECTION

㊱ **PFL (pre-fader listening) switches**
While the switch is depressed, the pre-fader signal from the corresponding channel can be monitored through headphones without affecting the main signal flow.
When the signal is to be monitored with the speakers connected to the MONITOR jacks ㊹, keep the speaker PFL switch ㊳ in the depressed position.

㊲ **EXT MON (external monitor) switch**
Depress to monitor the signals from the EXT MON INPUT jacks ㊺.
When the switch is depressed, the MASTER VU meters ㉗ indicate the external signal level.

㊳ **PFL (speaker pre-fader listening) switch**
When the switch is depressed, the original input signal corresponding the depressed PFL button ㊱ will be output from the MONITOR jacks ㊹.

㊴ **PHONES (headphones) jack** (stereo phone jack)
Accepts headphones having an impedance of 8 ohms or more.

㊵ **PHONES LEVEL (headphones level) control**
Adjusts the level of the headphones connected to the PHONES jacks ㊴㊺.

㊶ **MONITOR LEVEL control**
Adjusts the output level to the MONITOR jacks ㊹.

㊷ **MONITOR SELECT switch**
Selects the output signal to be monitored.
MASTER: line outputs ㉒㉓
AUX-1 / AUX-2 } corresponding auxiliary outputs ㉔
The setting of this selector will have no effect when any of the PFL switches ㊱ or the EXT MON switch ㊲ is depressed.

㊸ **MON MUTE (monitor mute) jack** (phono jack)
To externally mute by 20 dB the monitor outputs from the MONITOR jacks ㊹ by short-circuiting this jack.

㊹ **MONITOR L/R output jacks** (phono jacks)
To connect a power amplifier to drive the monitor speakers.

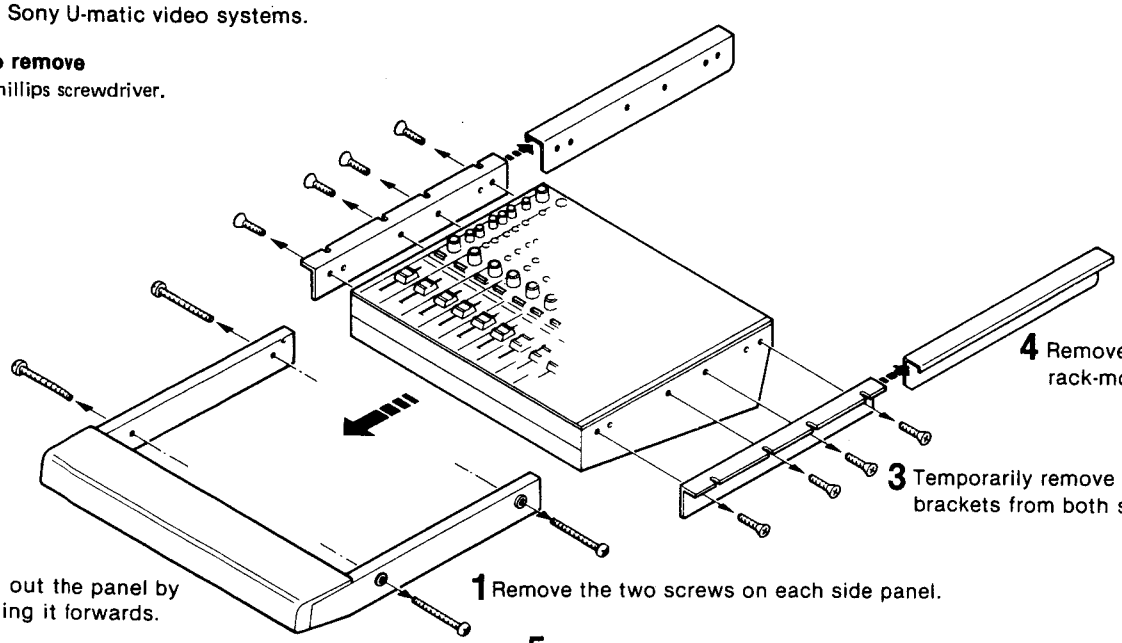
㊺ **PHONES L/R (external headphones) jacks** (phono jacks)
Feed out the same signals as those from the PHONES jack ㊴ on the operating panel.

㊻ **EXT MON INPUT L/R (external monitor input) jacks** (phono jacks)
To monitor external signals, for example; the monitoring of signals which have already been broadcast or recorded from the mixer.

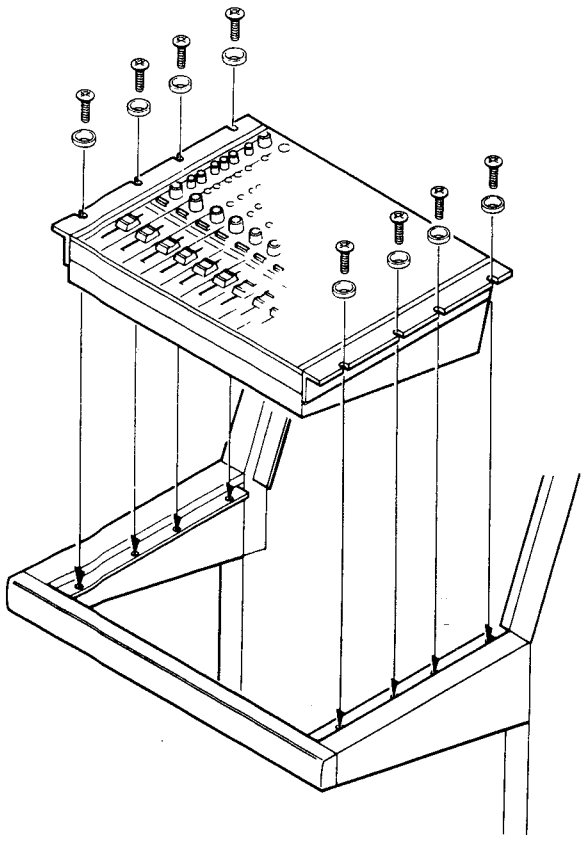
1-2. RACK MOUNTING

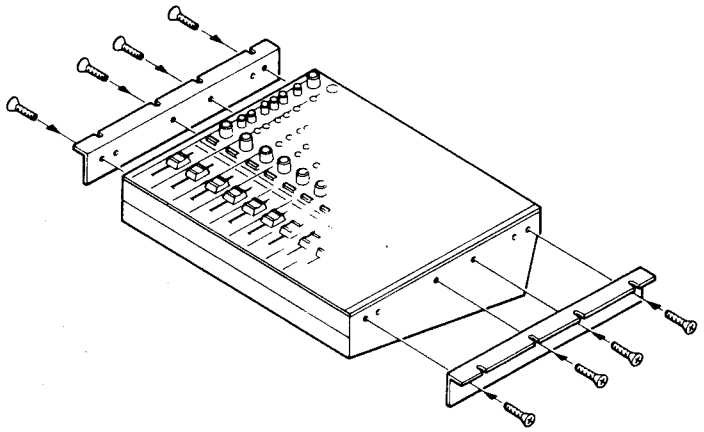
By removing the front and side panels, the MX-P21 can be mounted onto a 19-inch standard rack or one of the various racks designed for the Sony U-matic video systems.

How to remove
Use a Phillips screwdriver.

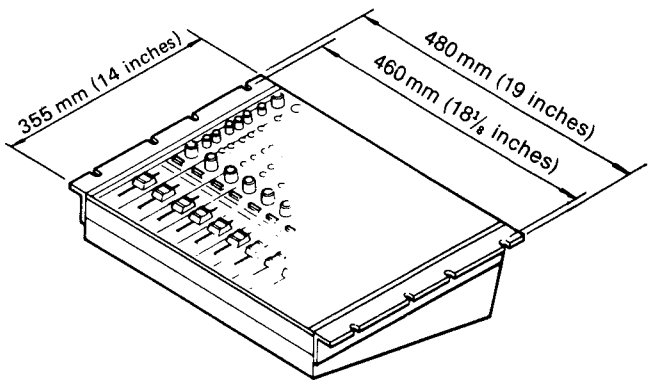

4 Remove the panels from the rack-mount brackets.
3 Temporarily remove the rack-mount brackets from both sides.
2 Pull out the panel by sliding it forwards.
1 Remove the two screws on each side panel.
5 Re-attach the rack-mount brackets to the sides.

Mounting example

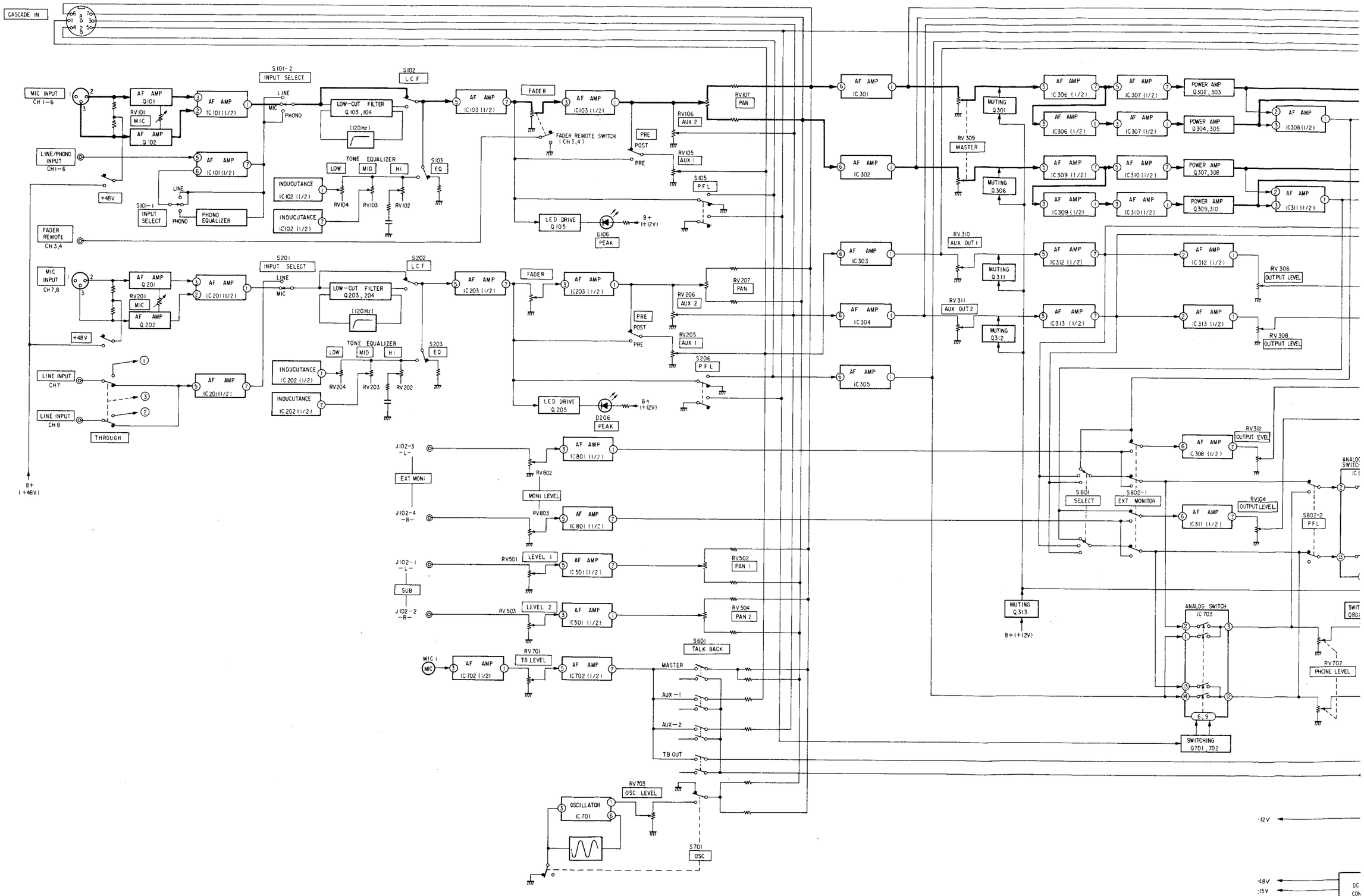


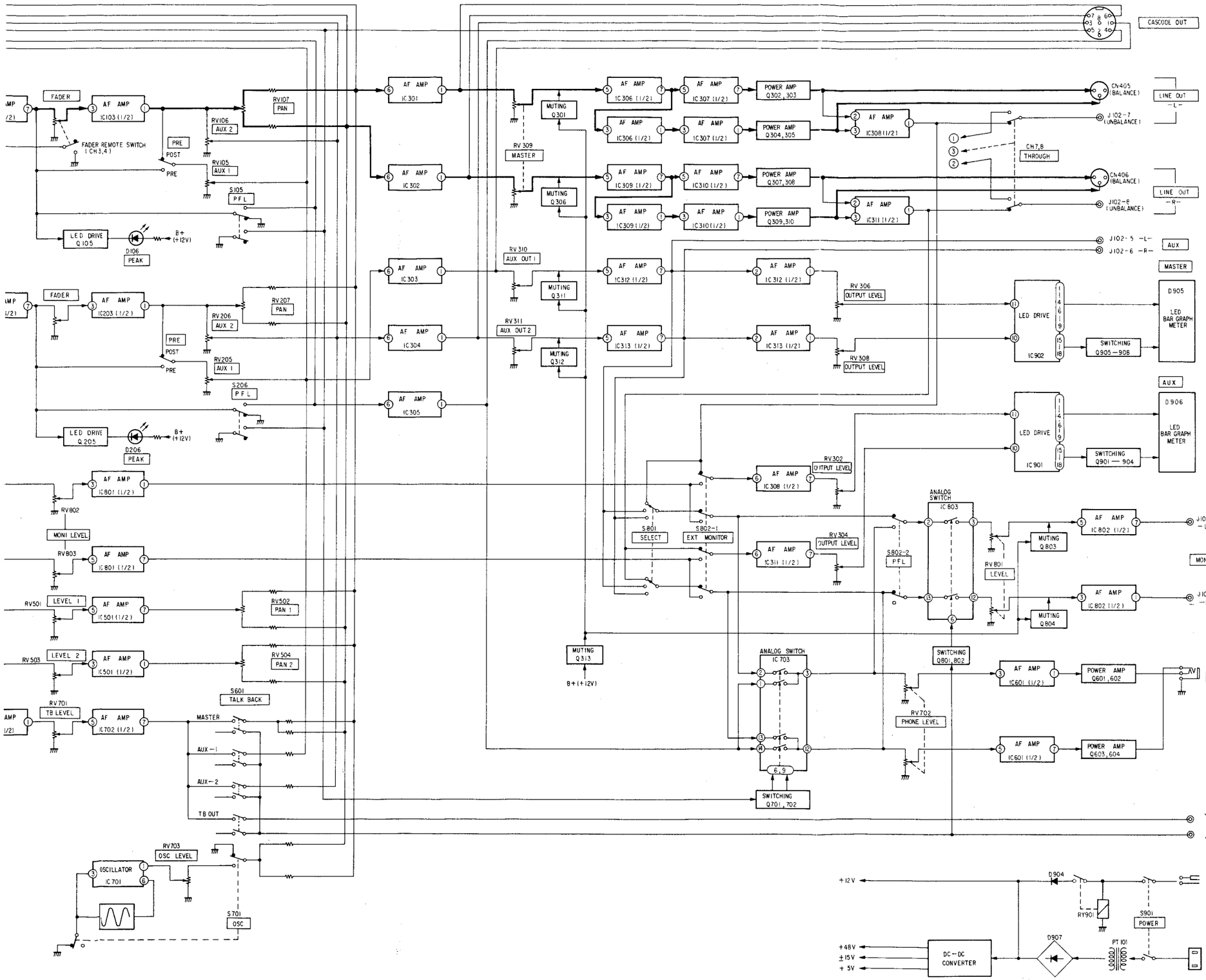


Mounting dimensions



1-3. BLOCK DIAGRAM

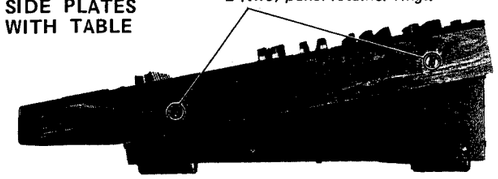



FADER
AF AMP IC103 (1/2)
RV107 PAN
RV106 AUX 2
FADER REMOTE SWITCH (CH3,4)
PRE
POST
PRE
RV105 AUX 1
S105 PFL
LED DRIVE Q105
B+ (+12V)
D106 PEAK
FADER
AF AMP IC203 (1/2)
RV207 PAN
RV206 AUX 2
PRE
POST
PRE
RV205 AUX 1
S206 PFL
LED DRIVE Q205
B+ (+12V)
D206 PEAK
AF AMP IC801 (1/2)
RV802
MONI LEVEL
RV803
AF AMP IC801 (1/2)
RV501 LEVEL 1
AF AMP IC501 (1/2)
RV502 PAN 1
RV503 LEVEL 2
AF AMP IC501 (1/2)
RV504 PAN 2
RV701 TB LEVEL
AF AMP IC702 (1/2)
S601 TALK BACK
MASTER
AUX-1
AUX-2
TB OUT
RV703 OSC LEVEL
OSCILLATOR IC701
S701 OSC
AF AMP IC301
AF AMP IC302
AF AMP IC303
AF AMP IC304
AF AMP IC305
MUTING Q301
MUTING Q306
MUTING Q311
MUTING Q312
MUTING Q313
RV309 MASTER
RV310 AUX OUT 1
RV311 AUX OUT 2
B+ (+12V)
AF AMP IC306 (1/2)
AF AMP IC307 (1/2)
POWER AMP Q302, 303
AF AMP IC306 (1/2)
AF AMP IC307 (1/2)
POWER AMP Q304, 305
AF AMP IC309 (1/2)
AF AMP IC310 (1/2)
POWER AMP Q307, 308
AF AMP IC309 (1/2)
AF AMP IC310 (1/2)
POWER AMP Q309, 310
AF AMP IC312 (1/2)
AF AMP IC313 (1/2)
AF AMP IC308 (1/2)
AF AMP IC311 (1/2)
AF AMP IC308 (1/2)
AF AMP IC311 (1/2)
RV306 OUTPUT LEVEL
RV308 OUTPUT LEVEL
RV302 OUTPUT LEVEL
RV304 OUTPUT LEVEL
S801 SELECT
S802-1 EXT MONITOR
S802-2 PFL
ANALOG SWITCH IC803
ANALOG SWITCH IC703
6, 9
SWITCHING Q701, 702
SWITCHING Q801, 802
RV801 LEVEL
MUTING Q803
MUTING Q804
AF AMP IC802 (1/2)
AF AMP IC802 (1/2)
RV702 PHONE LEVEL
AF AMP IC601 (1/2)
AF AMP IC601 (1/2)
POWER AMP Q601, 602
POWER AMP Q603, 604
CN601 PHONES
CN405 (BALANCE)
J102-7 (UNBALANCE)
CH7,8 THROUGH
CN406 (BALANCE)
J102-8 (UNBALANCE)
CASCODE OUT
LINE OUT -L-
LINE OUT -R-
J102-5 -L-
J102-6 -R-
AUX
MASTER
LED DRIVE IC902
SWITCHING Q905-908
D905 LED BAR GRAPH METER
AUX
LED DRIVE IC901
SWITCHING Q901-904
D906 LED BAR GRAPH METER
J102-11 -L-
MONITOR
J102-12 -R-
J102-13
T B
J102-14
MONI MUTE
+12V
D904
RY901
S901 POWER
CN906 DC IN
+48V
±15V
+5V
DC-DC CONVERTER
D907
PT101
CN905 AC IN

SECTION 2
DISASSEMBLY

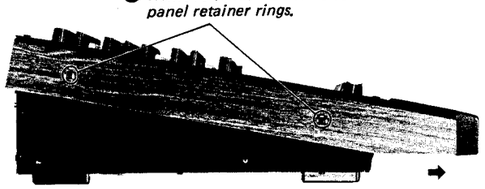
Note: Follow the disassembly procedure in the numerical order given.

ORNAMENTAL SIDE PLATES WITH TABLE



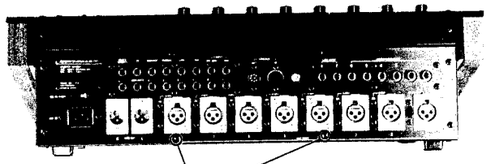
❶ *Remove 2 (two) +B3 x 30 screws and 2 (two) panel retainer rings.*

❷ *Remove (two) +B3 x 30 screws and 2 (two) panel retainer rings.*

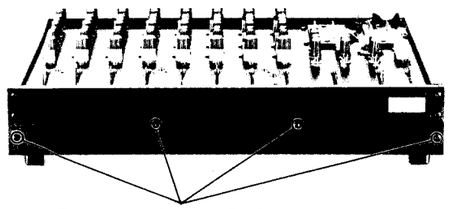


❸ *Pull forward.*

BOTTOM PLATE

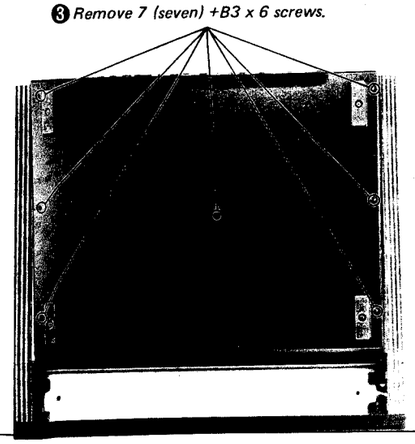


❶ *Remove 2 (two) +B3 x 6 screws and 2 (two) lockwashers (3 mm dia.).*



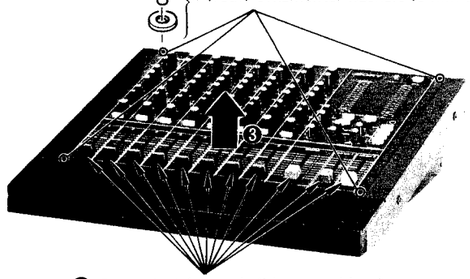
❷ *Remove 4 (four) +B3 x 6 screws.*

❸ *Remove 7 (seven) +B3 x 6 screws.*



ORNAMENTAL PANEL

❷ *Remove 4 (four) +RK3 x 8 screws and 4 (four) ornamental washers (3 mm dia.).*

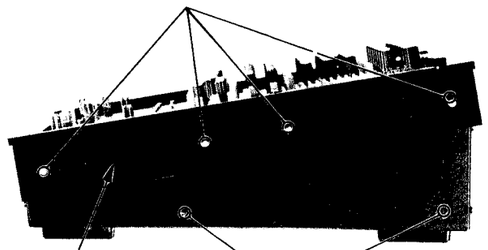


❶ *Pull off 11 (eleven) slide-control knobs.*

❸ *Lift ornamental panel upwards.*

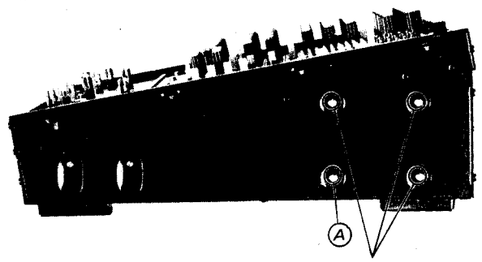
MOUNT FRAME, SIDE COVER AND POWER TRANSFORMER

❷ *Remove 4 (four) +K3 x 10 screws. (Both sides when required.).*

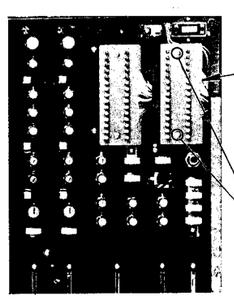


mount frame and mount-frame cover

❶ *Remove 2 (two) +B2 x 6 screws and side cover (right).*



❺ *+P4 x 10 (four) fastening power transformer.*

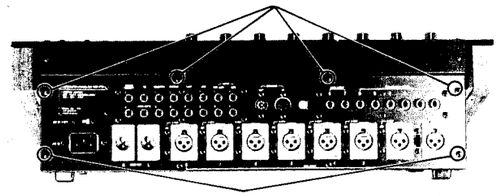


❹ *Hold nuts through this slot and remove a +P4 x 10 screw at position A. Other 3 (three) nuts can be held from the bottom.*

❸ *Remove 2 (two) +B2.6 x 8 screws, LED block (LED circuit board) and 2 (two) collars. Collars are located between LED block and chassis.*

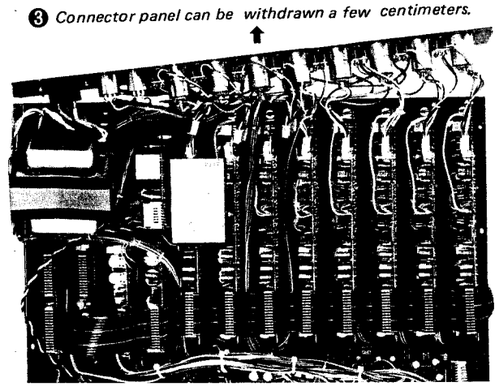
CONNECTOR PANEL

❶ *Remove 4 (four) +B3 x 6 screws and 4 (four) lockwashers (3 mm dia.).*

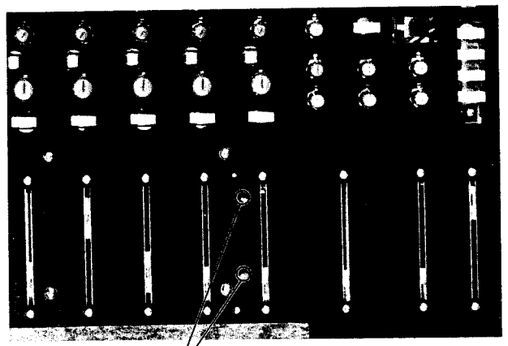


❷ *Remove 2 (two) +B3 x 6 screws, 2 (two) lockwashers (3 mm dia.) and 2 (two) rubber feet.*

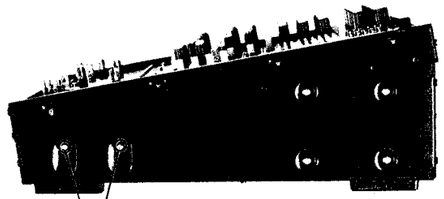
❸ *Connector panel can be withdrawn a few centimeters.*



DC-DC CONVERTER AND DC-DC CONVERTER CIRCUIT BOARD

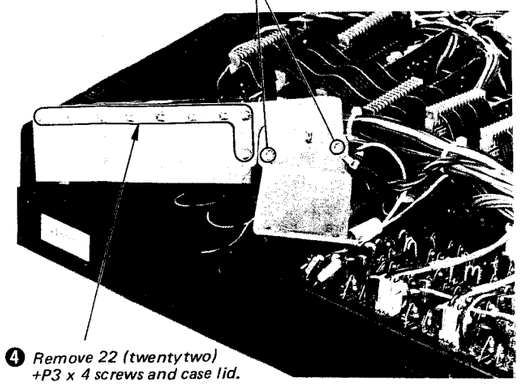


❶ *Remove 2 (two) +PSW3 x 8 screws.*



❷ *Remove 2 (two) +PSW3 x 6 screws.*

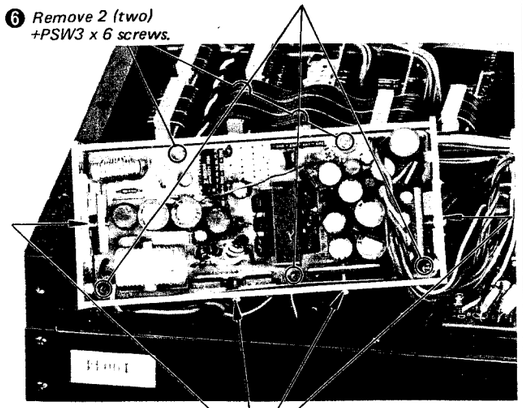
❸ *Remove 2 (two) +P3 x 8 screws and DDC bracket.*



❹ *Remove 22 (twentytwo) +P3 x 4 screws and case lid.*

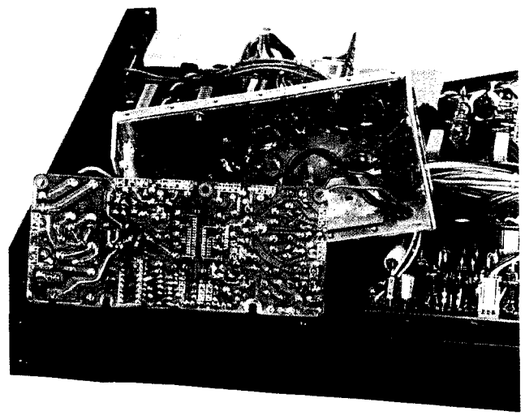
❺ *Remove 3 (three) +P3 x 4 screws.*

❻ *Remove 2 (two) +PSW3 x 6 screws.*



❼ *Remove 4 (four) +P3 x 12 screws and 4 (four) transistor brackets.*

❽ *Circuit board checking can be made in the following condition with power applied and without transistor brackets for a short period of time.*



SIDE FRA

❶ By u (eigh and

❷ The fol covers

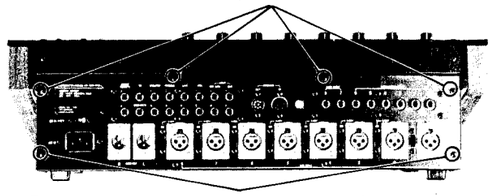
PGA BOA

❶ Rei

❷ PG side

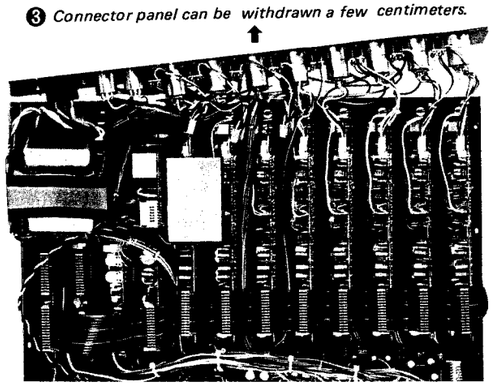
CONNECTOR PANEL

❶ Remove 4 (four) +B3 x 6 screws and 4 (four) lockwashers (3 mm dia.).

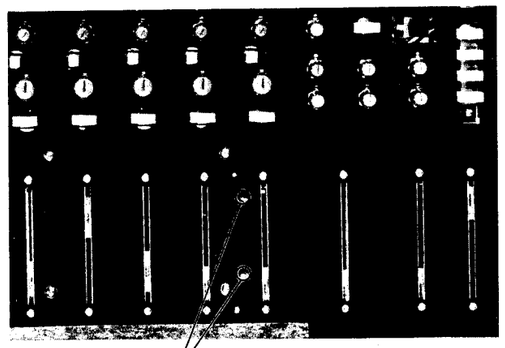


❷ Remove 2 (two) +B3 x 6 screws, 2 (two) lockwashers (3 mm dia.) and 2 (two) rubber feet.

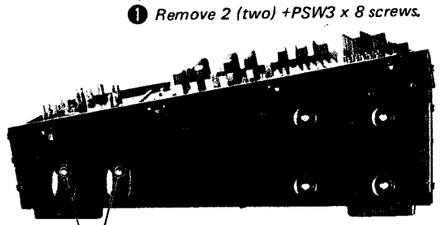
❸ Connector panel can be withdrawn a few centimeters.



DC-DC CONVERTER AND DC-DC CONVERTER CIRCUIT BOARD

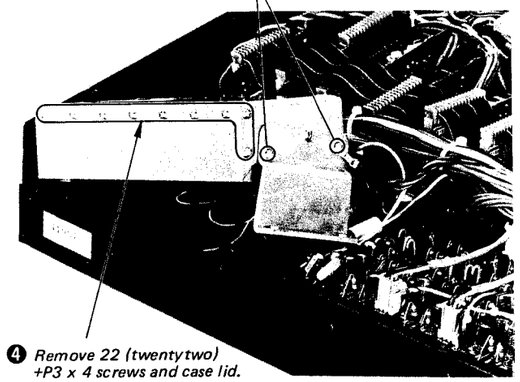


❶ Remove 2 (two) +PSW3 x 8 screws.



❷ Remove 2 (two) +PSW3 x 6 screws.

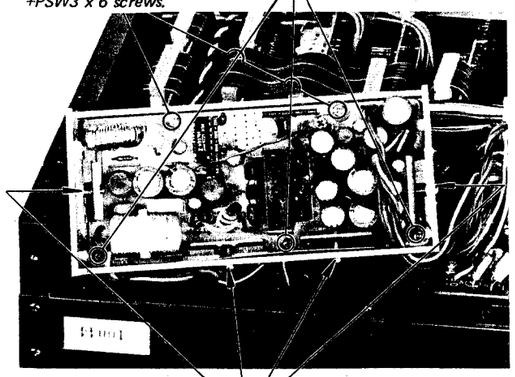
❸ Remove 2 (two) +P3 x 8 screws and DDC bracket.



❹ Remove 22 (twenty two) +P3 x 4 screws and case lid.

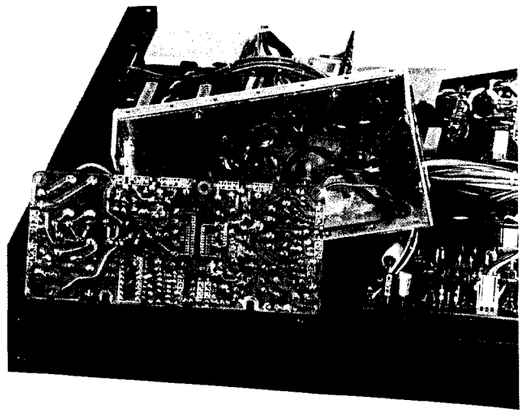
❺ Remove 3 (three) +P3 x 4 screws.

❻ Remove 2 (two) +PSW3 x 6 screws.



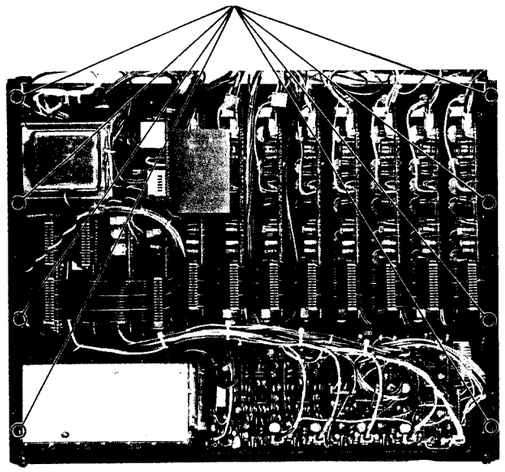
❼ Remove 4 (four) +P3 x 12 screws and 4 (four) transistor brackets.

❽ Circuit board checking can be made in the following condition with power applied and without transistor brackets for a short period of time.

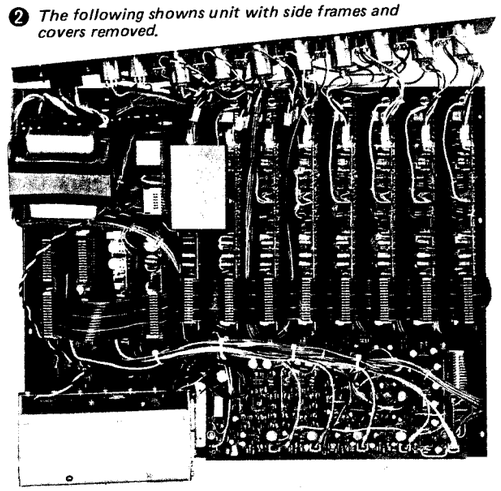


SIDE FRAMES, REAR COVER AND FRONT COVER

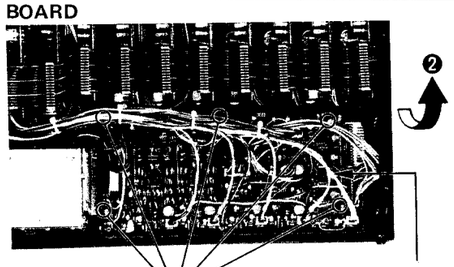
❶ By using a long phillips-head screwdriver, remove 8 (eight) +PSW3 x 6 screws. Side frames, rear cover and front cover can be removed together upwards.



❷ The following shows unit with side frames and covers removed.



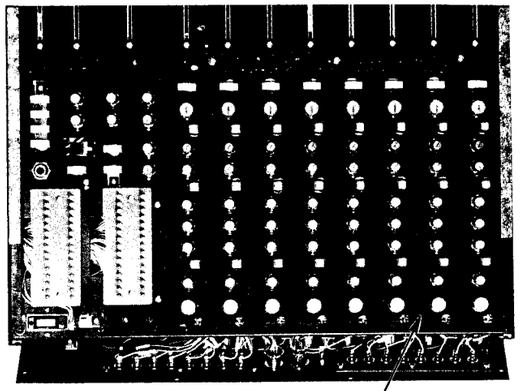
PGA BOARD



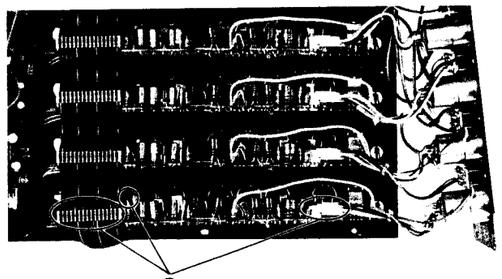
❶ Remove 5 (five) +PSW3 x 6 screws.

❷ PGA board can be fanned out upwards using harness side as pivot.

HA-1, HA-2 AND SUB IN BOARDS

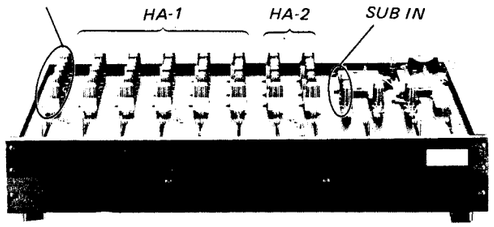


❶ Remove LED spacer.

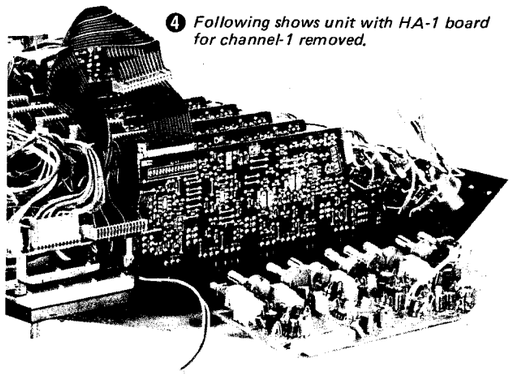


❷ Unplug 3 (three) connectors.

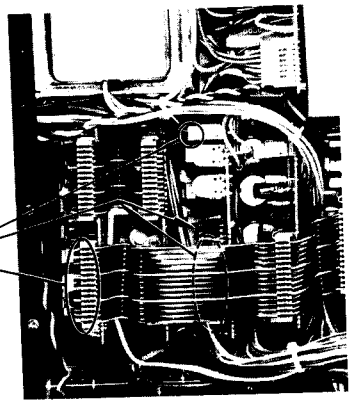
❸ Pull off control/switch knobs and buttons, and remove all control/switch nuts.



❹ Following shows unit with HA-1 board for channel-1 removed.

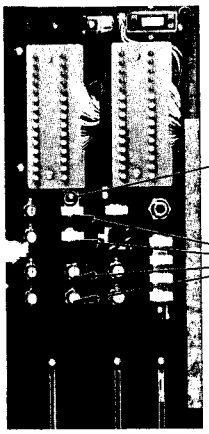


MA BOARD



❶ *Unplug connectors from CN601 and CN801 through CN805.*

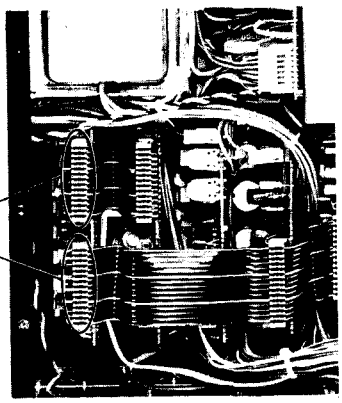
Note: Reconnect these connectors when checking the board with power applied by pulling out the connectors.



❸ *Remove 1 (one) +PS3 x 6 screw.*

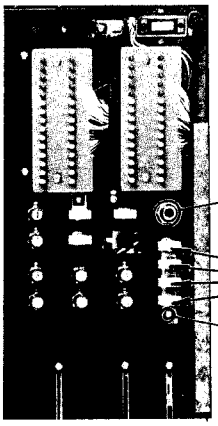
❷ *Pull off all control/switch knobs/ buttons and remove control/switch nuts.*

HPA BOARD



❶ *Unplug connectors from CN601 and CN602.*

Note: Reconnect these connectors when checking the board with power applied by pulling out the connectors.

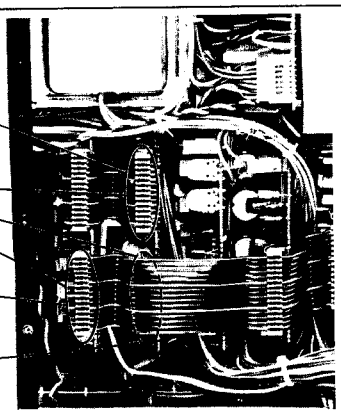


❸ *Remove jack nut.*

❷ *Pull off all switch buttons.*

❹ *Remove 1 (one) +PS3 x 6 screw.*

TB AND OSC BOARD



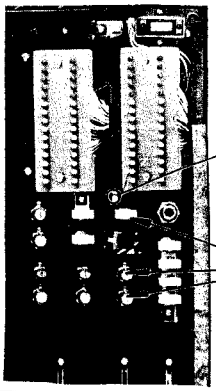
CN702

❶ *Unplug connectors from CN601 and CN701 through 3.*

CN601

CN701, 703

Note: Reconnect these connectors when checking the board with power applied by pulling out the connectors.

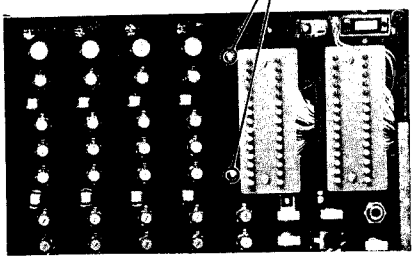


❸ *Remove 1 (one) +PS3 x 6 screw.*

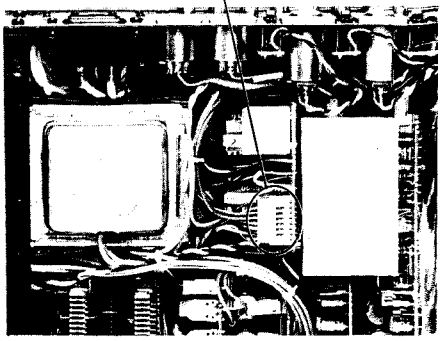
❷ *Pull off all switch knobs and button.*

METER AND PS BOARD

❶ *Remove 2 (two) +PS 3 x 6 screws.*

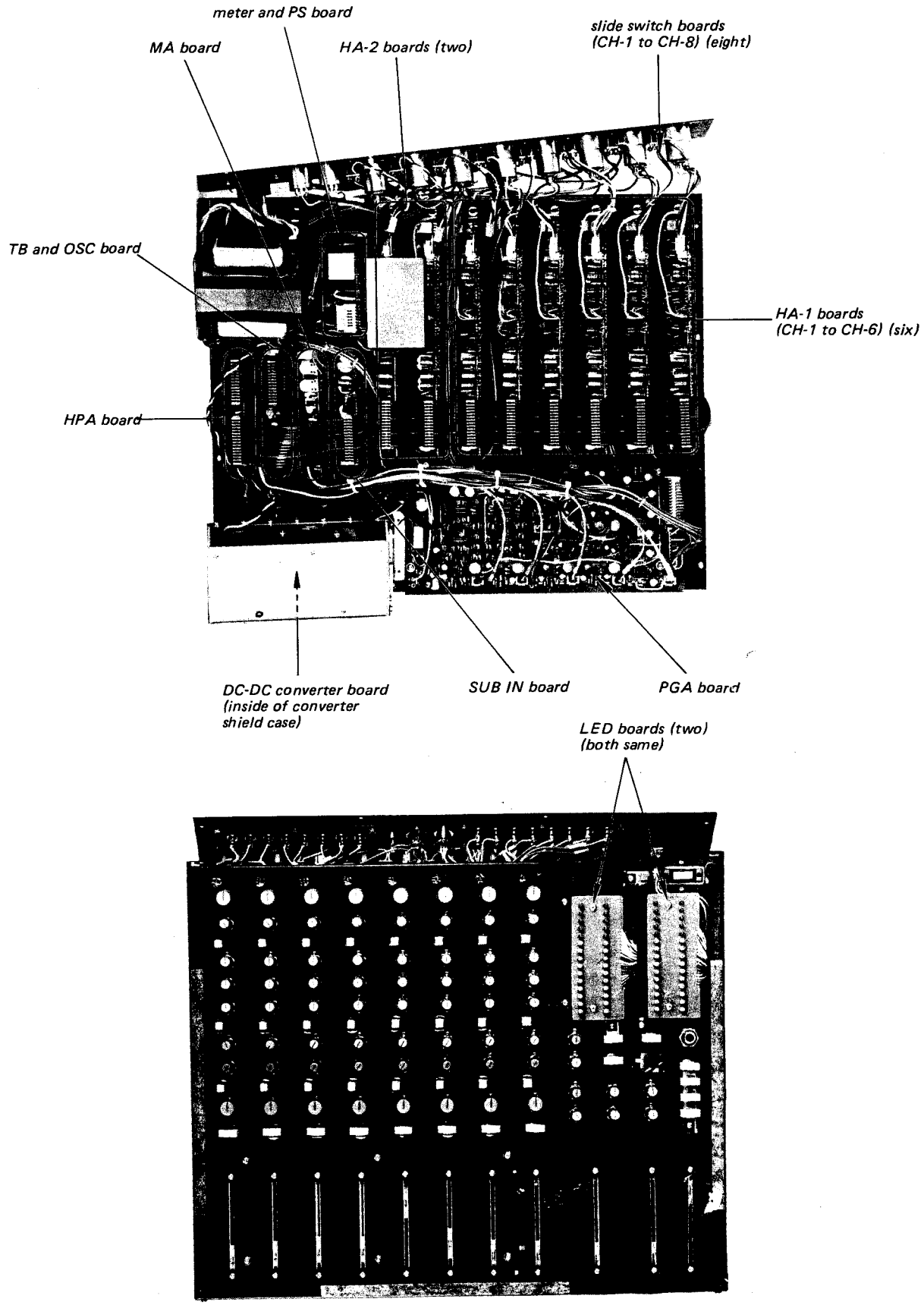


❷ *Unplug connectros CNP901 through CNP904.*



Note: Reconnect these connectors when checking the board with power applied by pulling out the connectors.

CIRCUIT BOARDS LAYOUT



SECTION 3
ADJUSTMENTS

+5 V VOLTAGE ADJUSTMENT

When components in the DC-DC converter are replaced, perform the following adjustment.

Set Up:

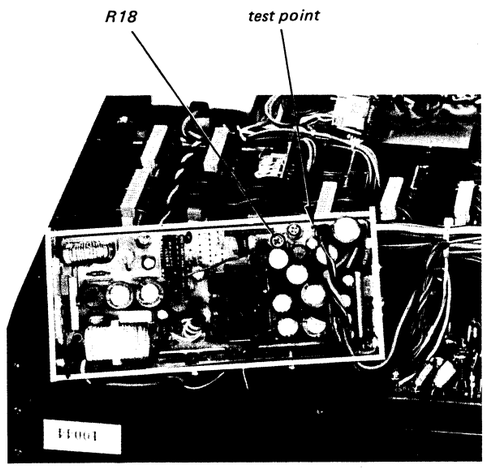
DC-DC converter is properly connected to the rest, i.e., properly loaded. Use adequate line (mains) voltage.

Procedure:

Adjust R18 so that the test-point (output line of +5 V) voltage becomes in +5.00 V.

Adjustment Location:

– DC-DC converter board –

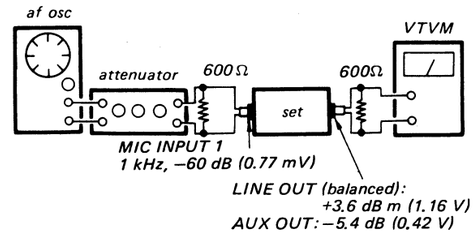


LEVEL METER ADJUSTMENT

Set Up:

PAN control: C (center click)
EQ switch: OFF
LCF switch: OFF
MIC LEVEL control: –60
LINE/MIC/PHONO switch: MIC

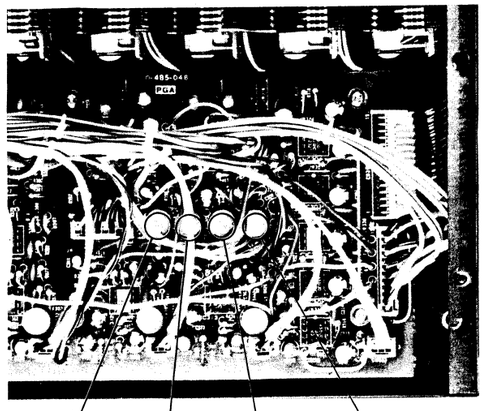
Procedure:



1. Adjust MASTER control so that balanced LINE OUT level becomes in 3.6 dBm (1.16 V).
2. Adjust RV302 (L-CH) and RV304 (R-CH) so that MASTER level meter reads "0" indication.
3. Adjust AUX OUT 1 and AUX OUT 2 controls so that AUX OUT 1 and AUX OUT 2 output levels become in –5.4 dB (0.42 V).
4. Adjust RV306 (AUX 1) and RV308 (AUX 2) so that AUX level meters indicate "0".

Adjustment Location:

– PGA board –

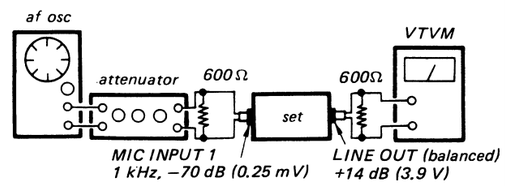


LINE OUT MAXIMUM GAIN ADJUSTMENT

Set Up:

PAN control: C (center click)
EQ switch: OFF
LCF switch: OFF
MIC LEVEL control: –60
LINE/MIC/PHONO switch: MIC

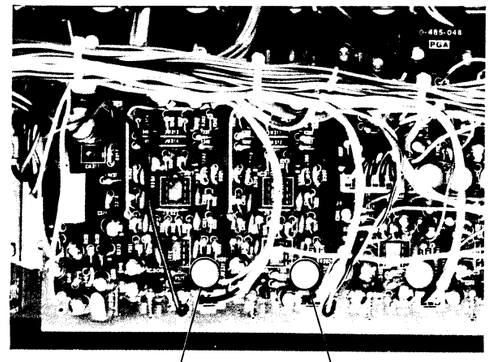
Procedure:



Adjust RV301 (L-CH) and RV303 (R-CH) so that the gain from MIC INPUT 1 to balanced LINE OUT becomes in 84 dB.

Adjustment Location:

– PGA board –

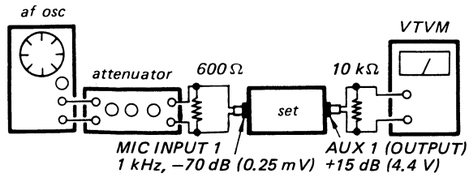


AUX 1 MAXIMUM GAIN ADJUSTMENT

Set Up:

PAN control: C (center click)
EQ switch: OFF
LCF switch: OFF
MIC LEVEL control: –60
LINE/MIC/PHONO switch: MIC
PRE/(post) switch: post (not depressed)

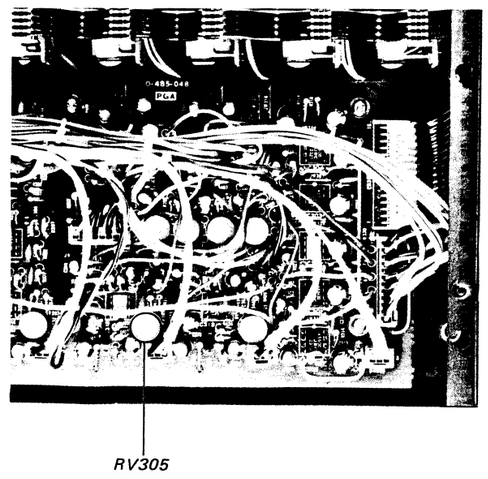
Procedure:



Adjust RV305 so that the gain from MIC INPUT 1 to AUX 1 output becomes in 85 dB.

Adjustment Location

– PGA board –

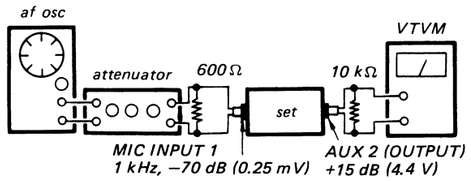


AUX 2 MAXIMUM GAIN ADJUSTMENT

Set Up:

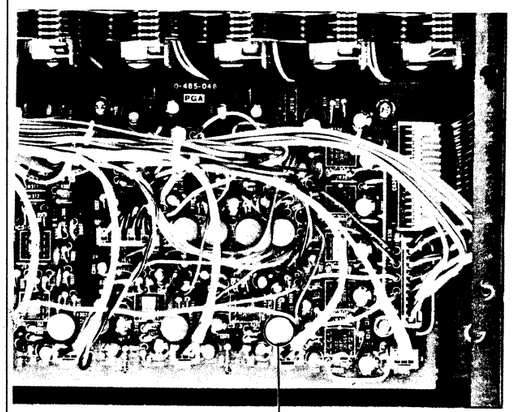
PAN control: C (center click)
EQ switch: OFF
LCF switch: OFF
MIC LEVEL control: −60
LINE/MIC/PHONO switch: MIC

Procedure:



Adjust RV307 so that the gain from MIC INPUT 1 to AUX 2 output becomes in 85 dB.

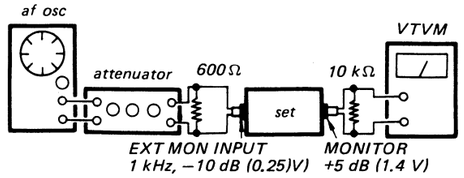
Adjustment Location:
– PGA board –



EXTERNAL MONITOR LEVEL ADJUSTMENT

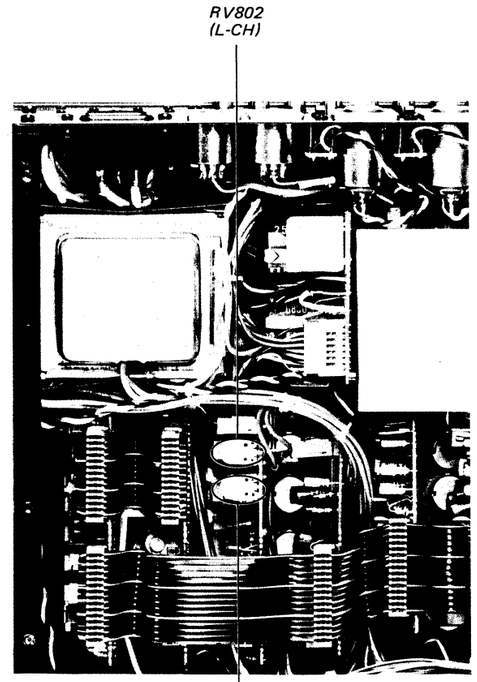
Set Up:

EXT MON switch: ON
MONITOR LEVEL control: 10 (maximum)



Adjust RV802 (L-CH) and RV803 (R-CH) so that output level at MONITOR L and MONITOR R jacks become in +5 dB (1.4 V) respectively.

Adjustment Location:
– MA board –

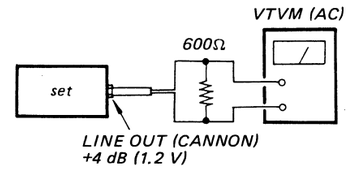


TEST OSCILLATOR OUTPUT LEVEL ADJUSTMENT

Set Up:

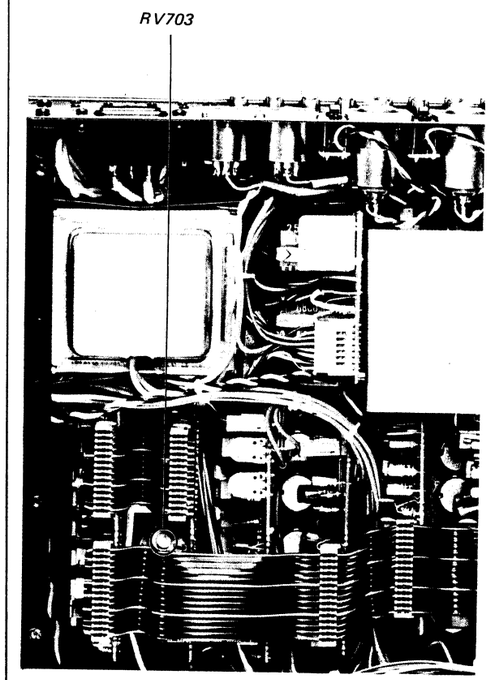
MASTER control: center of wide line at 7
OSC switch: ON
SELECT switch: MASTER

Procedure:

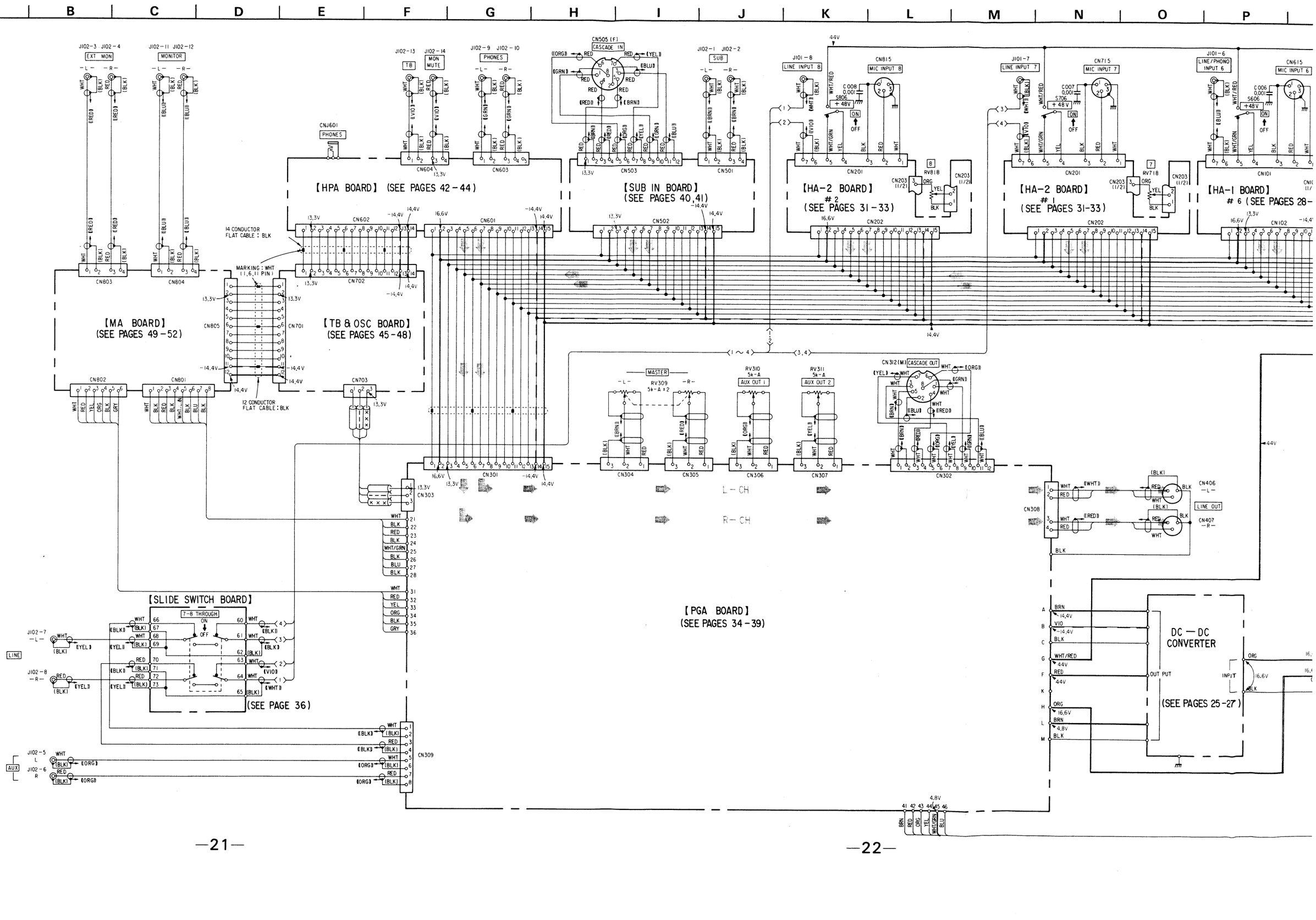


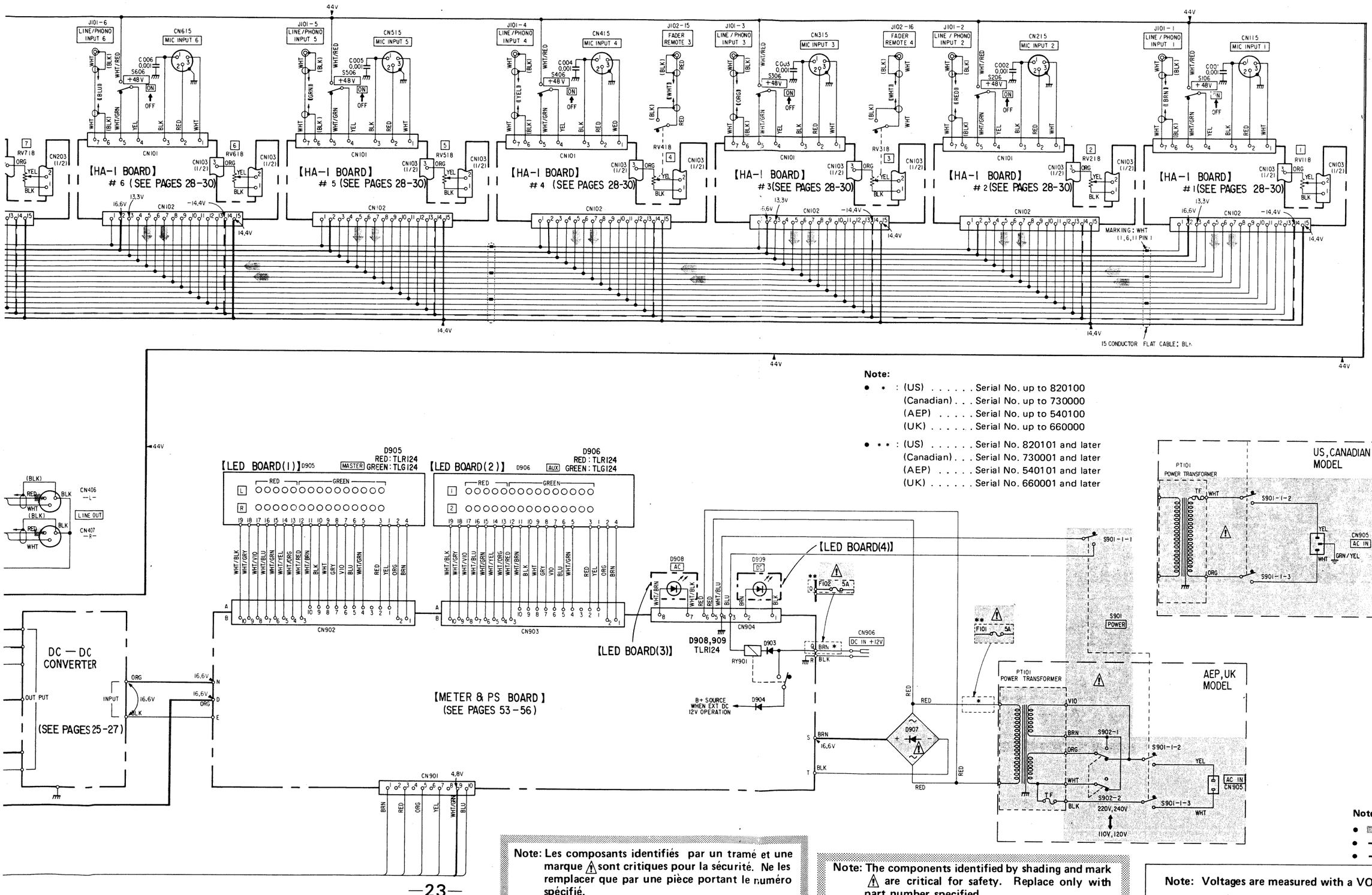
Adjust RV703 so that output at cannon LINE OUT connector becomes in 4 dB (1.2 V).
The oscillator frequency should be 1000 Hz ±10 % and the distortion should be within 1.0 %.

Adjustment Location:
– TB & OSC board –



4-1. FRAME WIRING DIAGRAM





Note:

- ● * : (US) . . . . . Serial No. up to 820100
  (Canadian) . . . Serial No. up to 730000
  (AEP) . . . . . Serial No. up to 540100
  (UK) . . . . . Serial No. up to 660000
- ● ** : (US) . . . . . Serial No. 820101 and later
  (Canadian) . . . Serial No. 730001 and later
  (AEP) . . . . . Serial No. 540101 and later
  (UK) . . . . . Serial No. 660001 and later

Note:

- ● ▨ : signal path
- ● ——— : B+ bus.
- ● – – – : B– bus.

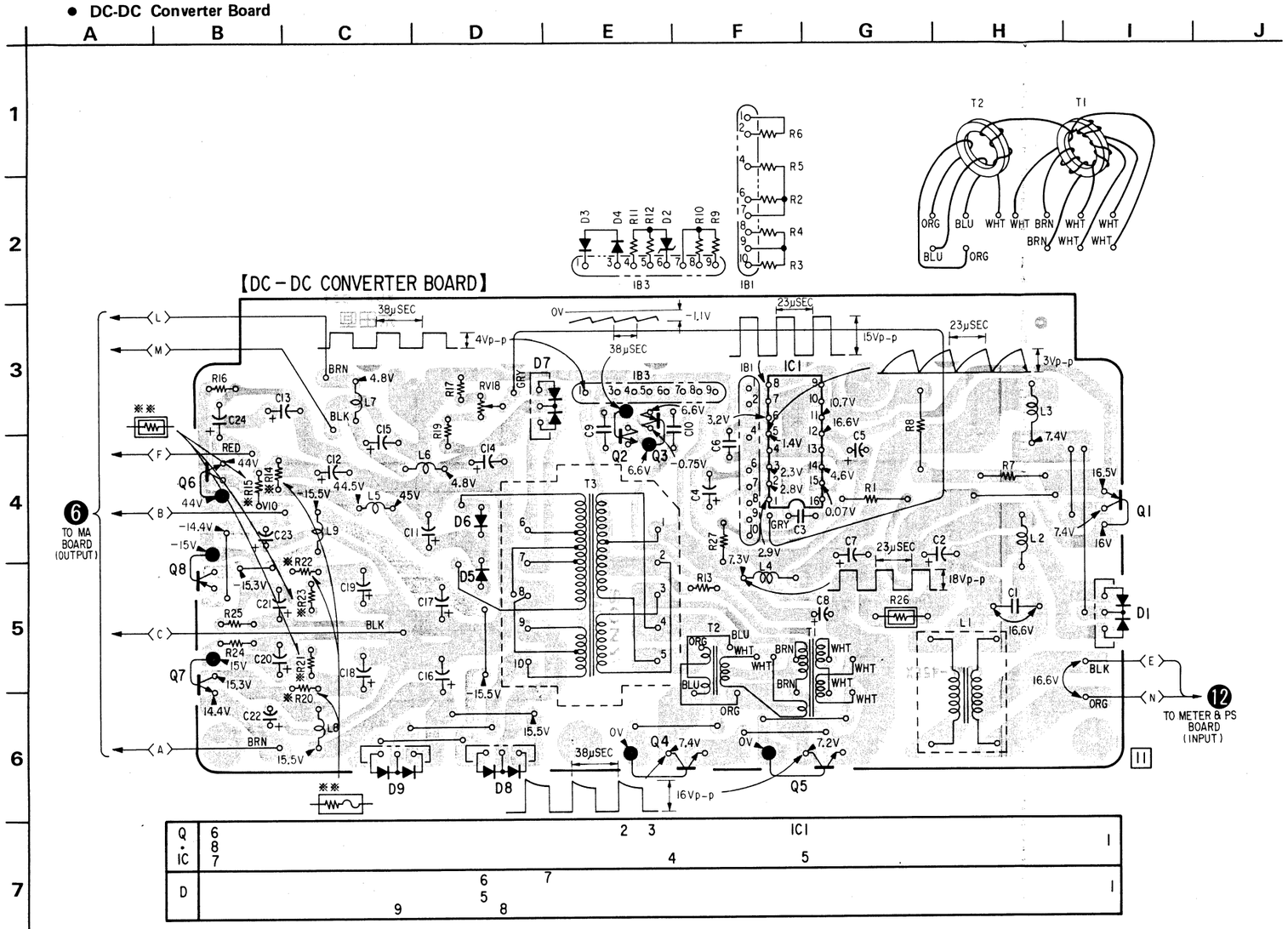
Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Voltages are measured with a VOM (50kΩ/V).

4-2. MOUNTING DIAGRAM (1)

- DC-DC Converter Board

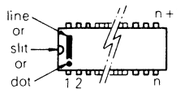


Note:

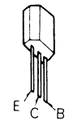
- ○—: parts extracted from the component side.
- * : (US) . . . . . Serial No. up to 820100
  (Canadian) . . . Serial No. up to 730000
  (UK) . . . . . Serial No. up to 660000
- ** : (US) . . . . . Serial No. 820101 and later
  (Canadian) . . . Serial No. 730001 and later
  (AEP) . . . . . All
  (UK) . . . . . Serial No. 660001 and later
- : B+ pattern

- **Semiconductor Lead Layouts**

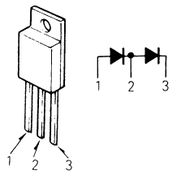
MB3759



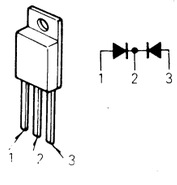
2SA1175
2SC2785



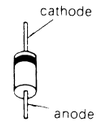
ESAC31-02D



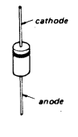
ESAB85-009



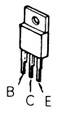
RD5.6EB3
RD7.5EB3
1S2348H



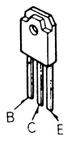
ERB44-02



2SA1012
2SC2334

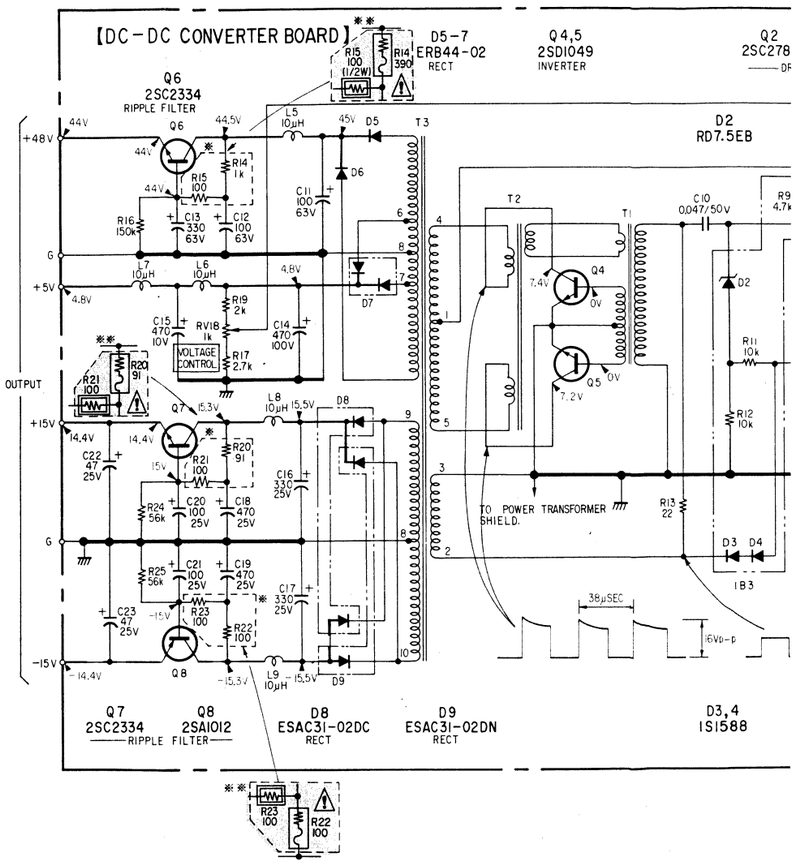


2SD1049



4-3. SCHEMATIC DIAGRAM (1)

- DC-DC Converter Board

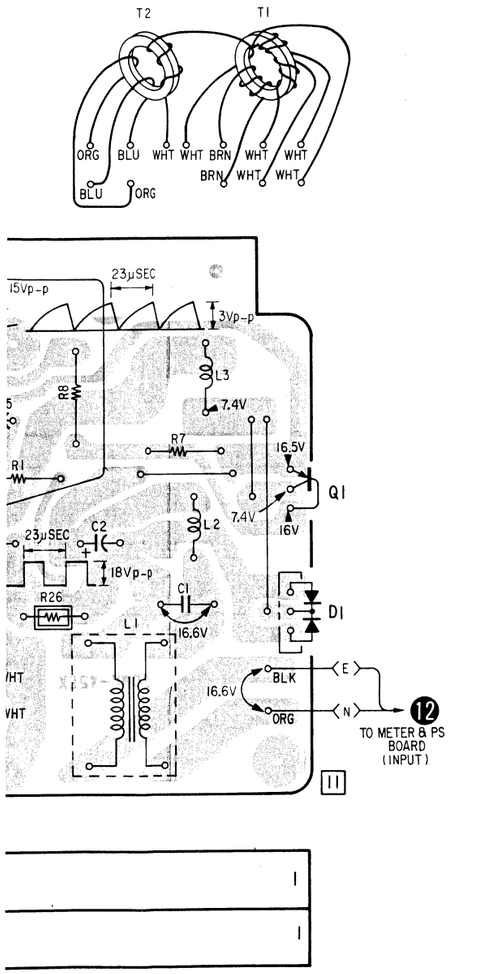


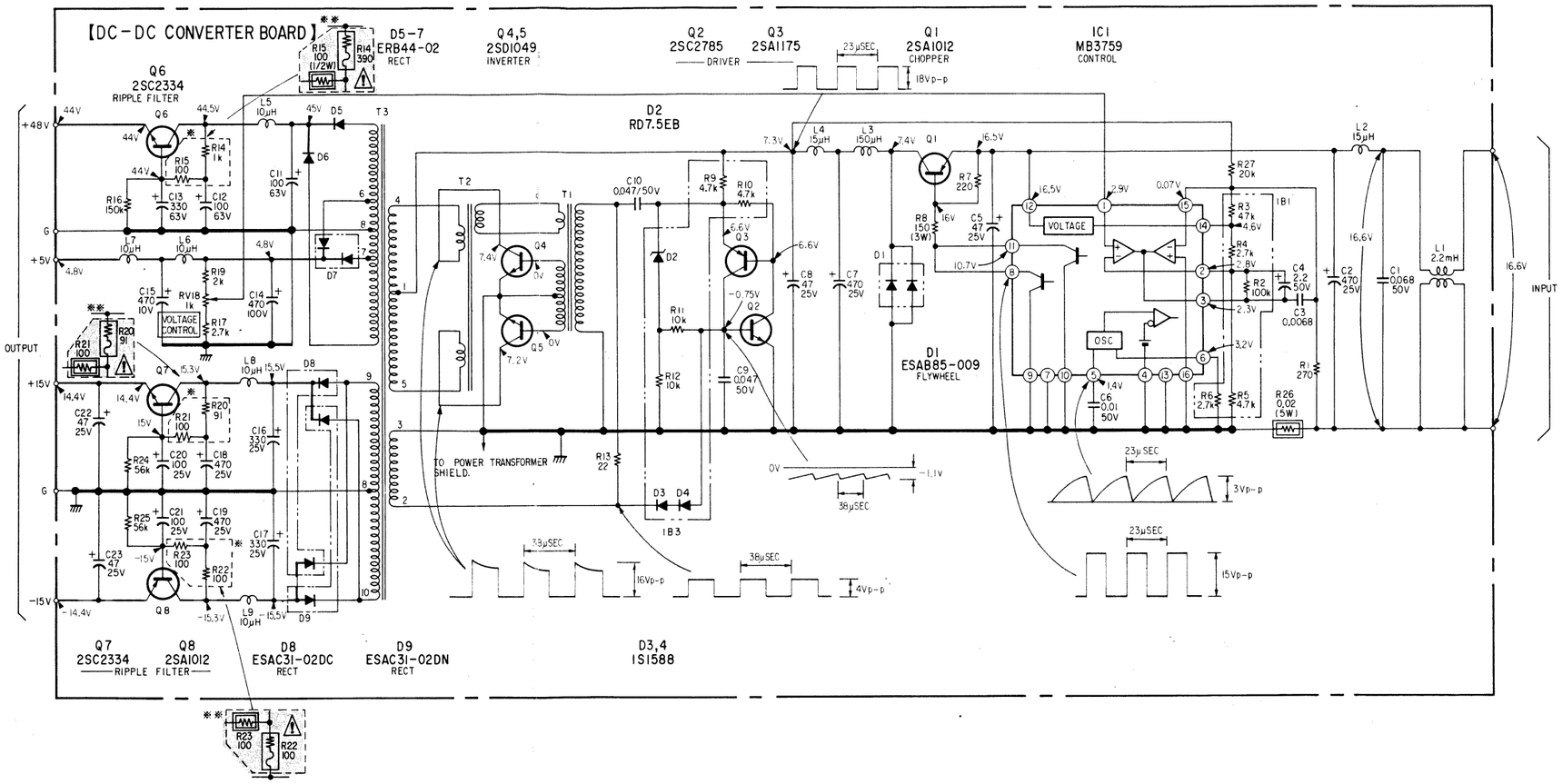
Note:

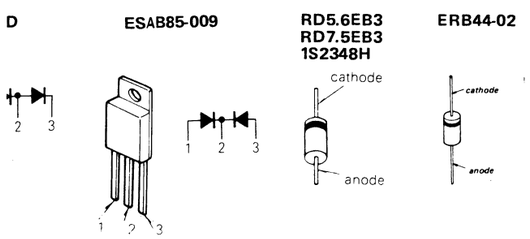
- All capacito
  50WV or le
  and tantalur
- All resistors
  kΩ : 1000
- : non
- : adju
- Readings ar
  VOM (50 kΩ
- * : (US) .
  (Canad
  (UK) .
- ** : (US) .
  (Canad
  (AEP)
  (UK) .

4-3. SCHEMATIC DIAGRAM (1)

- DC-DC Converter Board







Note:

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, ¼W unless otherwise noted. kΩ : 1000Ω, MΩ : 1000kΩ
- : nonflammable resistor.
- : adjustment for repair.
- Readings are taken under no-signal conditions with a VOM (50 kΩ/V).
- * : (US) . . . . . Serial No. up to 820100
  (Canadian) . . . Serial No. up to 730000
  (UK) . . . . . Serial No. up to 660000
- ** : (US) . . . . . Serial No. 820101 and later
  (Canadian) . . . Serial No. 730001 and later
  (AEP) . . . . . All
  (UK) . . . . . Serial No. 660001 and later

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Note: Voltages are measured with a VOM (50kΩ/V).

4-4. MOUNTING DIAGRAM (2)

- **HA-1 Board**

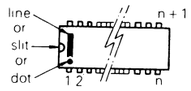
- * : (US) . . . . . Serial No. up to 820100
  (Canadian) . . . Serial No. up to 730000
  (AEP) . . . . . Serial No. up to 540100
  (UK) . . . . . Serial No. up to 660000
- ** : (US) . . . . . Serial No. 820101 and later
  (Canadian) . . . Serial No. 730001 and later
  (AEP) . . . . . Serial No. 540101 and later
  (UK) . . . . . Serial No. 660001 and later

4-5. SCHEMATIC DIAGRAM (2)

- **HA-1 Board**

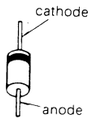
- **Semiconductor Lead Layouts**

NJM4560D-D
NJM4560D

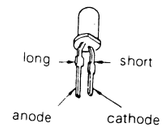


2SA872-E
2SC1364
2SC1775A
2SC2014

RD7.5EB1
1S1555

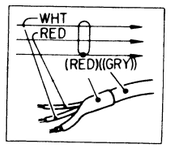


TLR124



Note:

- Color code of sleeving over the end of the jacket.



- ○— : parts extracted from the component side.
- : B + pattern
- ▬▶▬ : signal path
- ▬▶ : L-CH signal path
- ▬·▬▶ : R-CH signal path

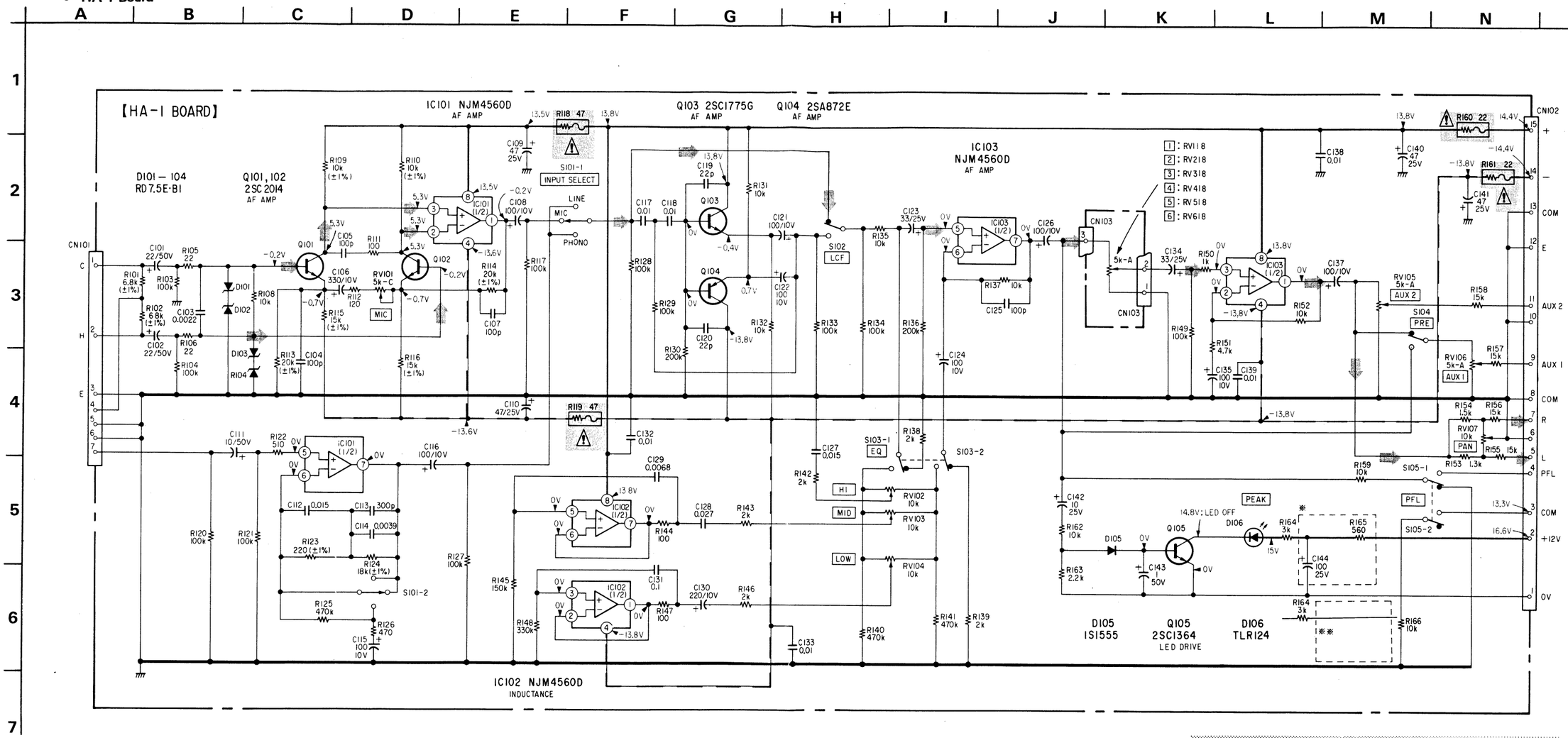
Note:

- All capacitor
  50WV or le
  and tantalum
- All resistors
  kΩ : 1000 Ω
- ▭ : pane
- ——— : B+
- – – – : B-
- Readings are
  VOM (50 kΩ
- : signal pa
- Switch

Ref. No.
S101
S102
S103
S104
S105

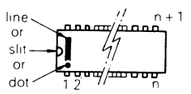
4-5. SCHEMATIC DIAGRAM (2)

- **HA-1 Board**

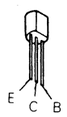


- **Semiconductor Lead Layouts**

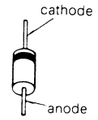
NJM4560D-D
NJM4560D



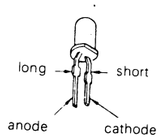
2SA872-E
2SC1364
2SC1775A
2SC2014



RD7.5EB1
1S1555

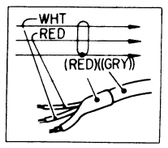


TLR124



Note:

- Color code of sleeving over the end of the jacket.



- ○— : parts extracted from the component side.
- : B + pattern
- ▬▶▬ : signal path
- ▬▪▬▶ : L-CH signal path
- ▬▪▪▬▶ : R-CH signal path

Note:

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, ¼W unless otherwise noted. kΩ : 1000Ω, MΩ : 1000kΩ
- ▭ : panel designation.
- ——— : B+ bus.
- – – – : B– bus.
- Readings are taken under no-signal conditions with a VOM (50 kΩ/V).
- ▨ : signal path
- Switch

Ref. No.	Switch	Position
S101	INPUT SELECT	MIC
S102	LCF	OFF
S103	EQ	OFF
S104	PRE	OFF
S105	PFL	OFF

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

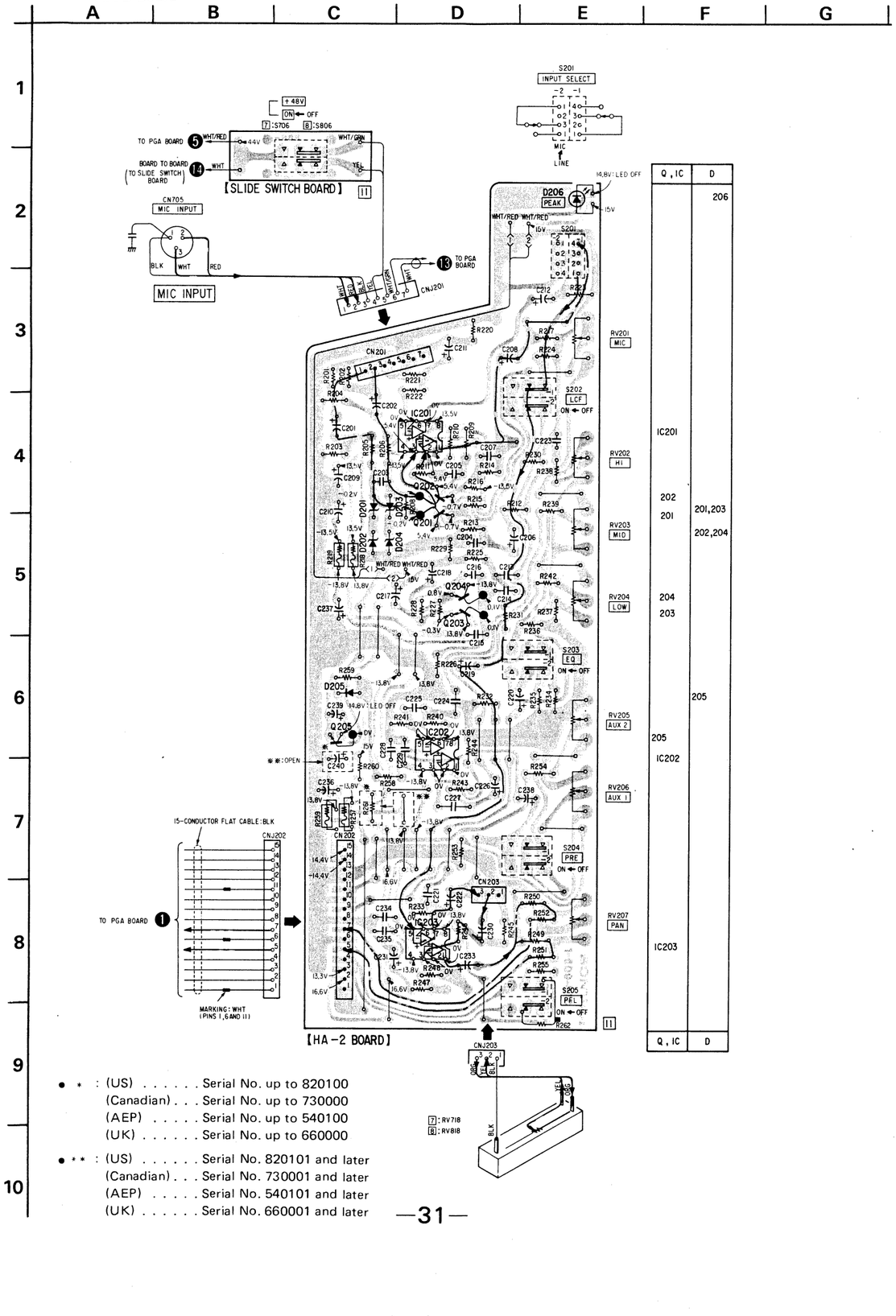
Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Note: Voltages are measured with a VOM (50kΩ/V).

- ★ : (US) . . . . . Serial No. up to 820100
  (Canadian) . . . Serial No. up to 730000
  (AEP) . . . . Serial No. up to 540100
  (UK) . . . . . Serial No. up to 660000
- ★★ : (US) . . . . . Serial No. 820101 and later
  (Canadian) . . . Serial No. 730001 and later
  (AEP) . . . . Serial No. 540101 and later
  (UK) . . . . . Serial No. 660001 and later

4-6. MOUNTING DIAGRAM (3)

- HA-2 Board

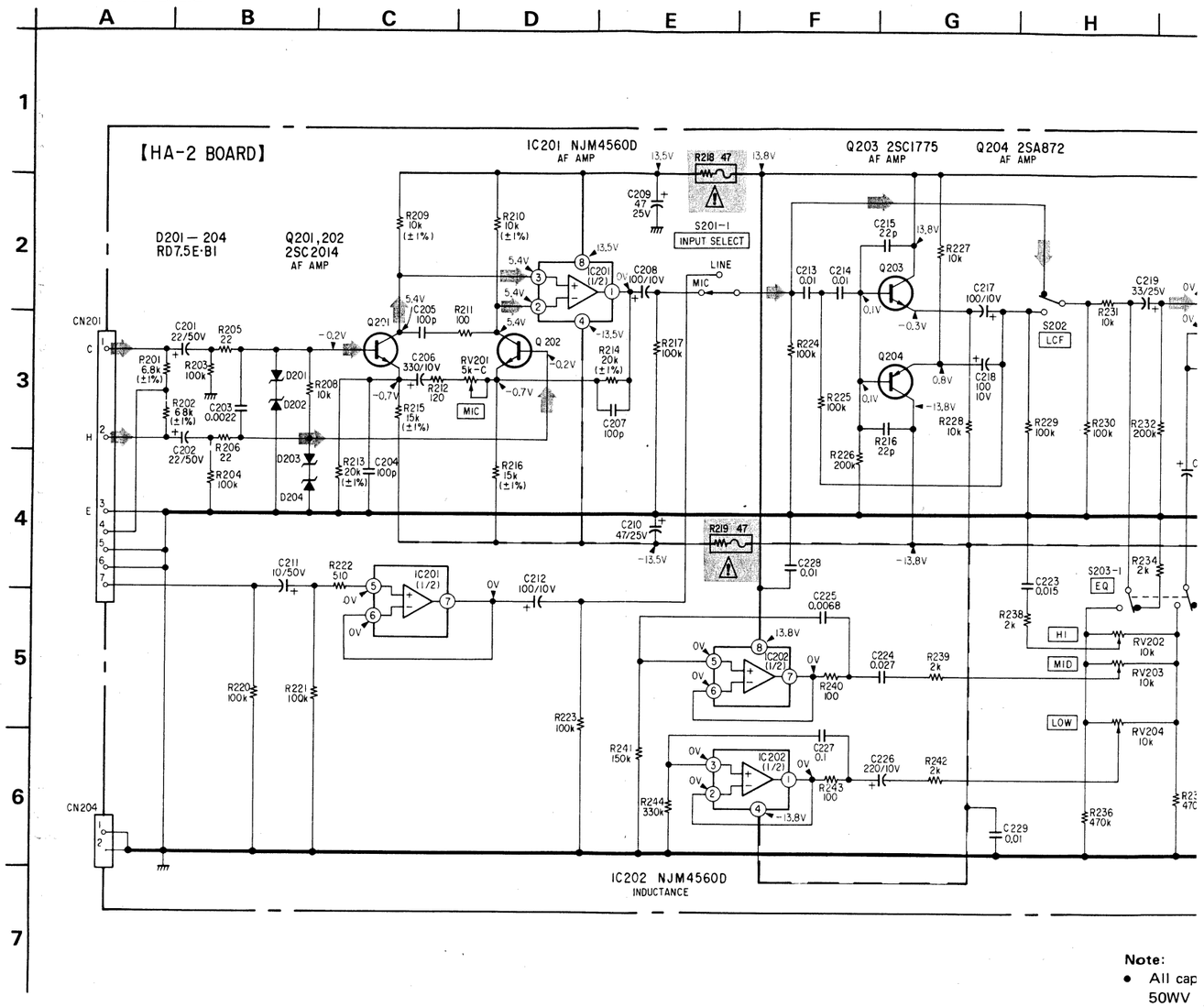


Q, IC	D
	206
IC201	
202	
201	201,203
	202,204
204	
203	
	205
205	
IC202	
IC203	

- * : (US) . . . . . Serial No. up to 820100
  (Canadian) . . . Serial No. up to 730000
  (AEP) . . . . . Serial No. up to 540100
  (UK) . . . . . Serial No. up to 660000
- * * : (US) . . . . . Serial No. 820101 and later
  (Canadian) . . . Serial No. 730001 and later
  (AEP) . . . . . Serial No. 540101 and later
  (UK) . . . . . Serial No. 660001 and later

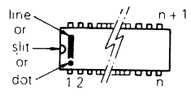
4-7. SCHEMATIC DIAGRAM (3)

- HA-2 Board



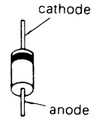
- Semiconductor Lead Layouts

NJM4560D-D
NJM4560D

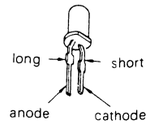


2SA872-E
2SC1364
2SC1775A
2SC2014

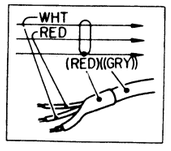
RD7.5EB1
1S1555



TLR124



Note:
- Color code of sleeving over the end of the jacket.

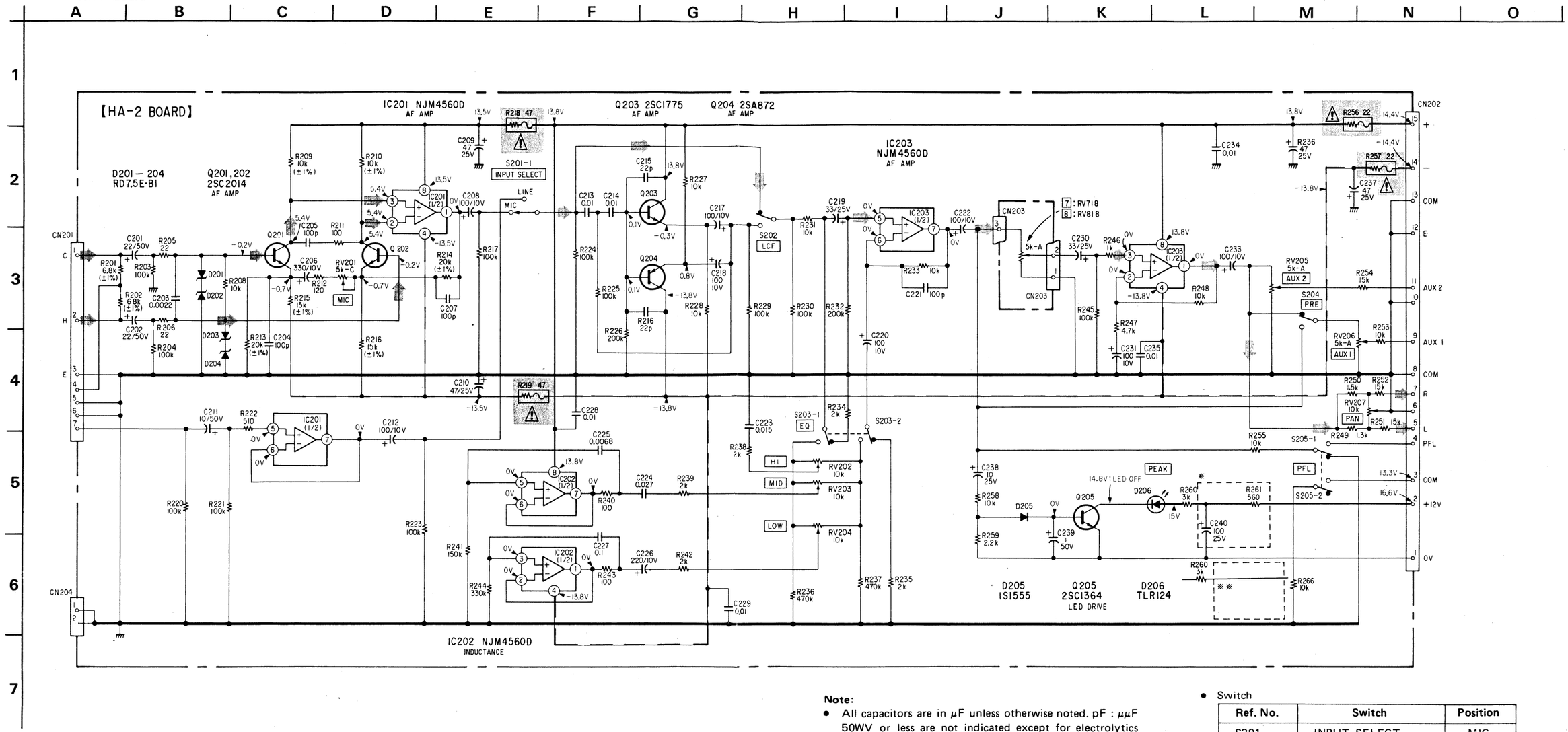


- ○— : parts extracted from the component side.
- : B + pattern
- * : B – pattern
- : signal path
- : L-CH signal path
- : R-CH signal path

Note:
- All cap
  50WV
  and tar
- All res
  kΩ : 1
- : sig
- Readir
  VOM (
- * : (U
  (C
  (A
  (U
- * * : (U
  (C
  (A
  (U

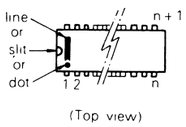
4-7. SCHEMATIC DIAGRAM (3)

- HA-2 Board

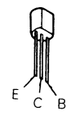


• Semiconductor Lead Layouts

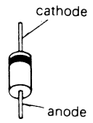
NJM4560D-D
NJM4560D



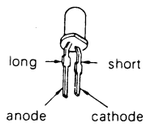
2SA872-E
2SC1364
2SC1775A
2SC2014



RD7.5EB1
1S1555

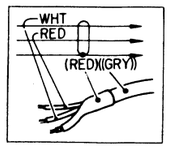


TLR124



Note:

- Color code of sleeving over the end of the jacket.



- ○— : parts extracted from the component side.
- : B + pattern
- : B – pattern
- : signal path
- : L-CH signal path
- : R-CH signal path

Note:

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, ¼W unless otherwise noted. kΩ : 1000Ω, MΩ : 1000kΩ
- ▭ : panel designation.
- : signal path
- ——— : B+ bus.
- – – – : B– bus.
- Readings are taken under no-signal conditions with a VOM (50 kΩ/V).
- * : (US) . . . . . Serial No. up to 820100
  (Canadian) . . . Serial No. up to 730000
  (AEP) . . . . . Serial No. up to 540100
  (UK) . . . . . Serial No. up to 660000
- * * : (US) . . . . . Serial No. 820101 and later
  (Canadian) . . . Serial No. 730001 and later
  (AEP) . . . . . Serial No. 540101 and later
  (UK) . . . . . Serial No. 660001 and later

- Switch

Ref. No.	Switch	Position
S201	INPUT SELECT	MIC
S202	LCF	OFF
S203	EQ	OFF
S204	PRE	OFF
S205	PFL	OFF

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

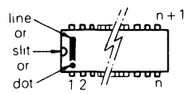
Note: Voltages are measured with a VOM (50kΩ/V).

4-8. MOUNTING DIAGRAM (4)

- **PGA Board**

- **Semiconductor Lead Layouts**

NJM4560D



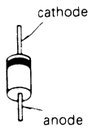
(Top view)

2SB647
2SD667A

2SC1213A

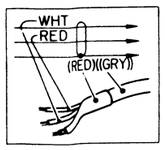
2SA952

1S1555
RD7.5EB1

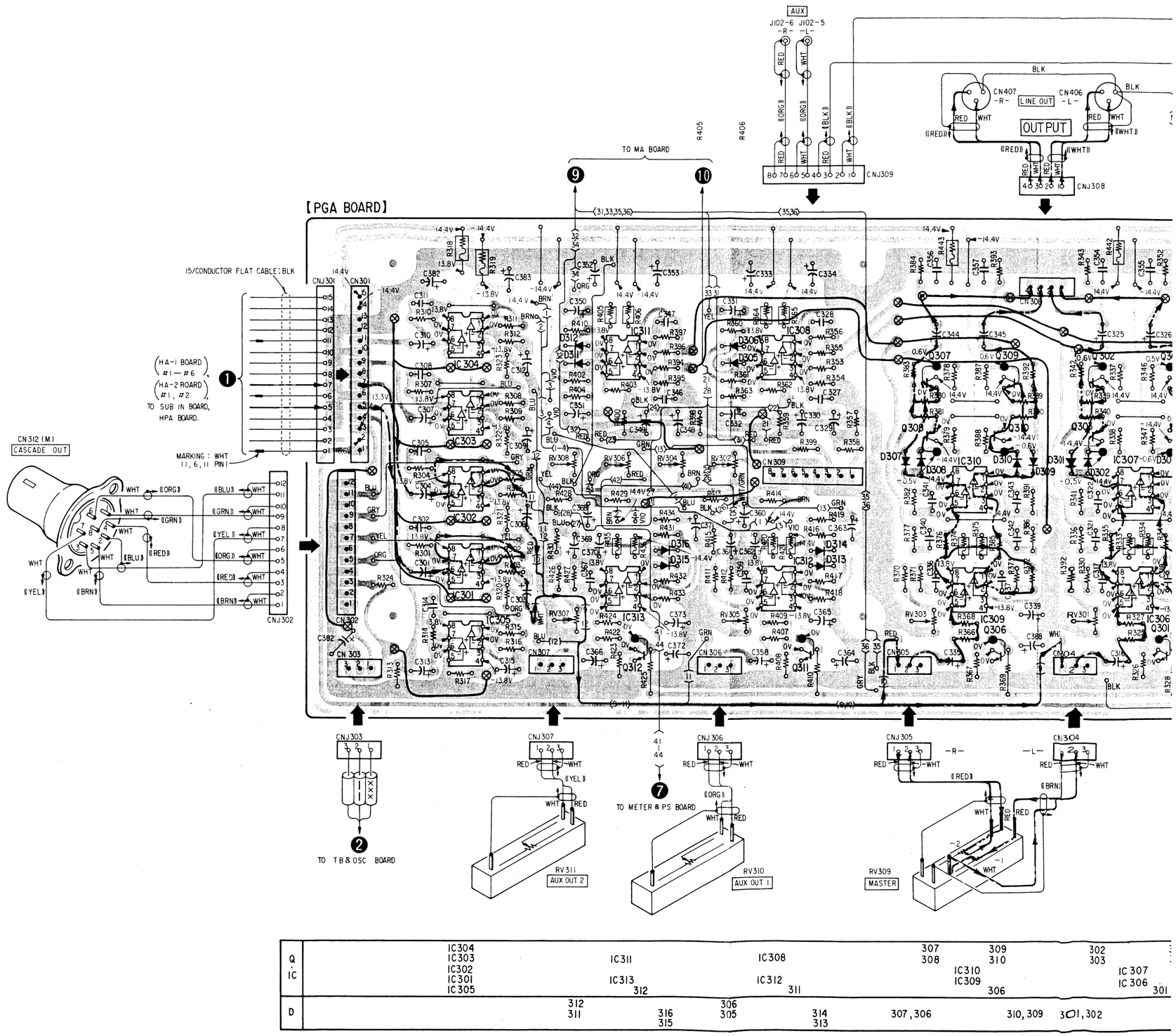


Note:

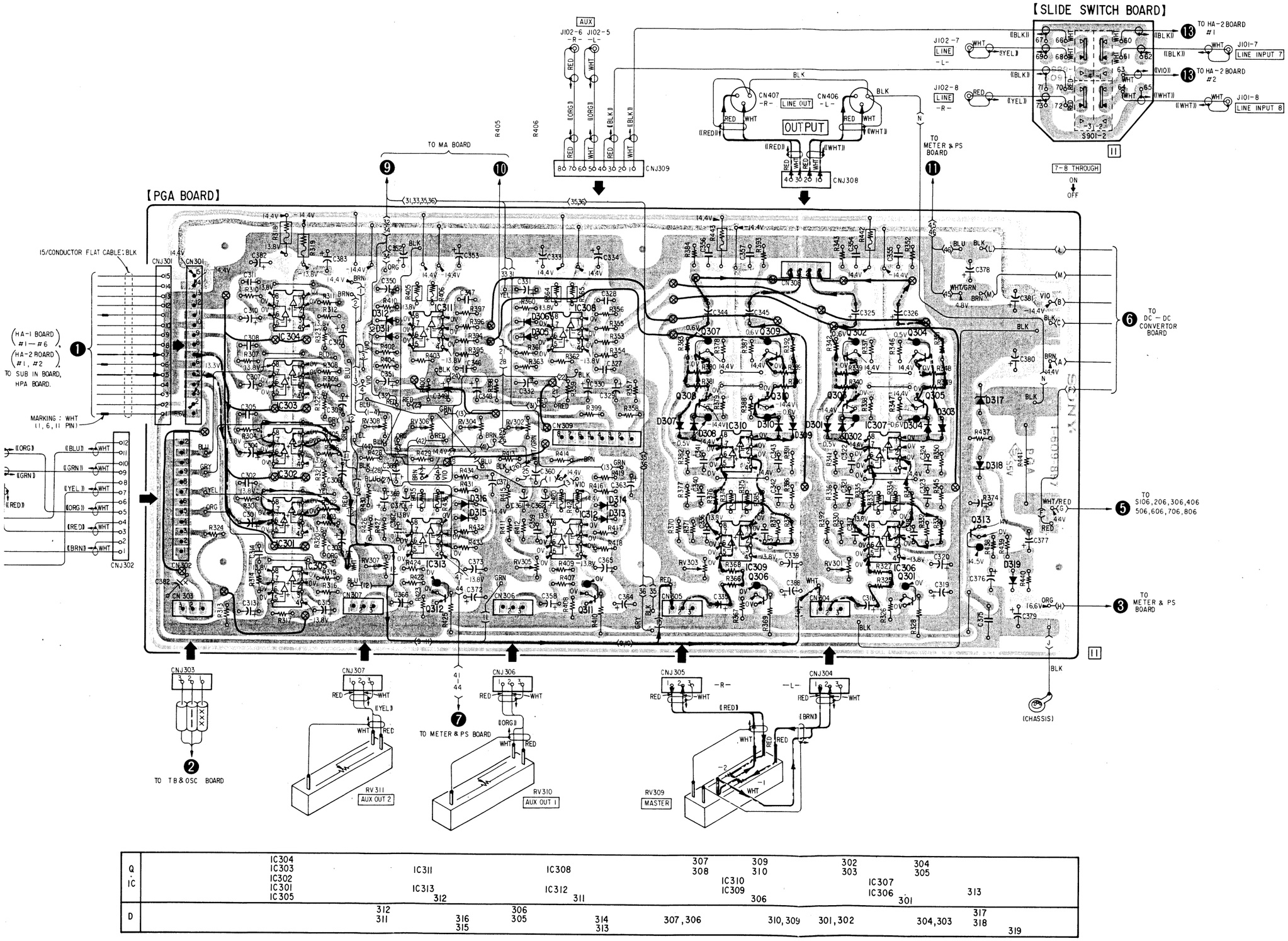
- Color code of sleeving over the end of the jacket.



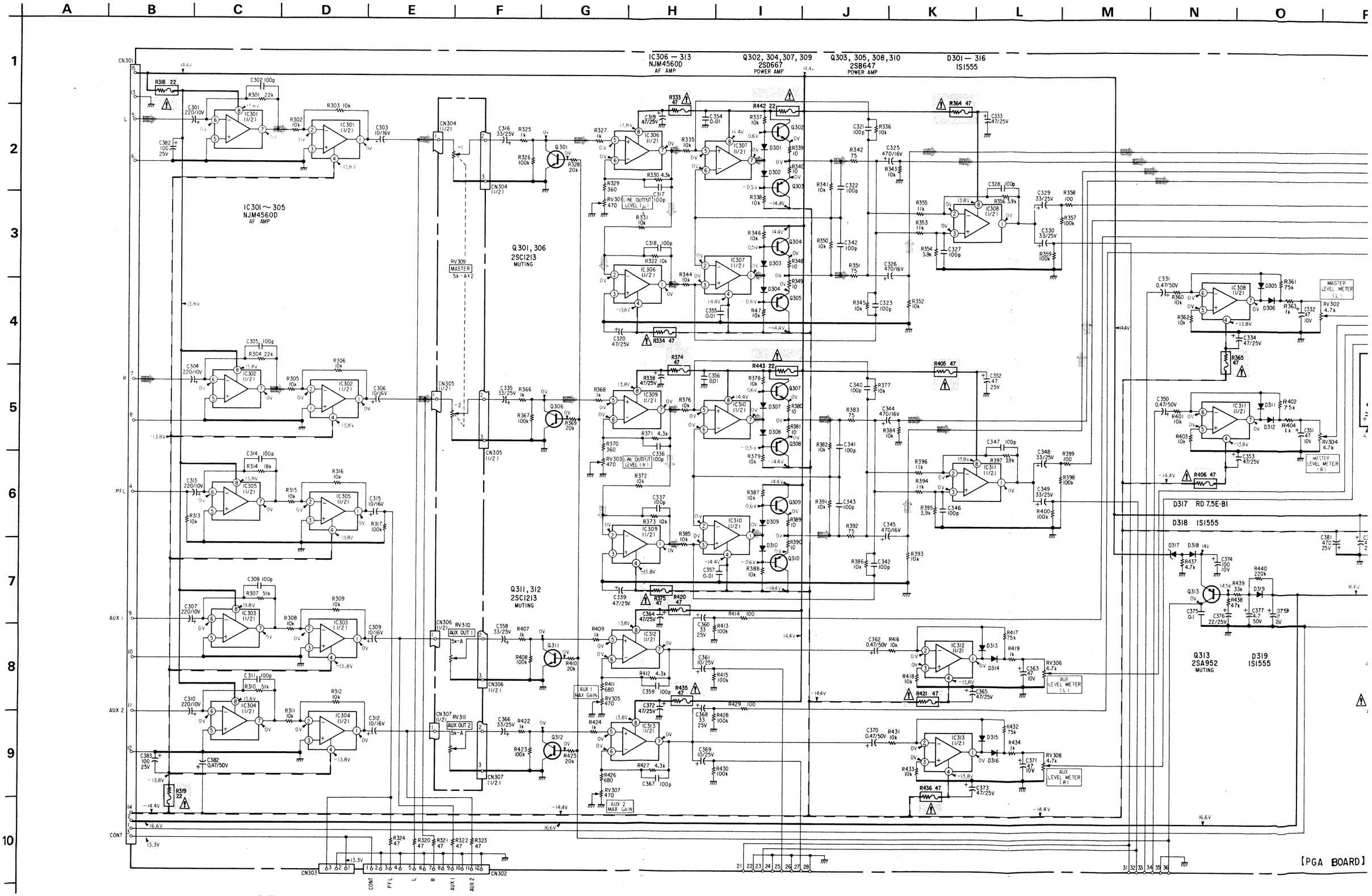
- ○— : parts extracted from the component side.
- ⊗ : Through hole.
- [illegible] : B + pattern
- [illegible] : [illegible]
- ▬▶▬ : signal path
- ▬▶ : L-CH signal path
- ▬▶ : R-CH signal path

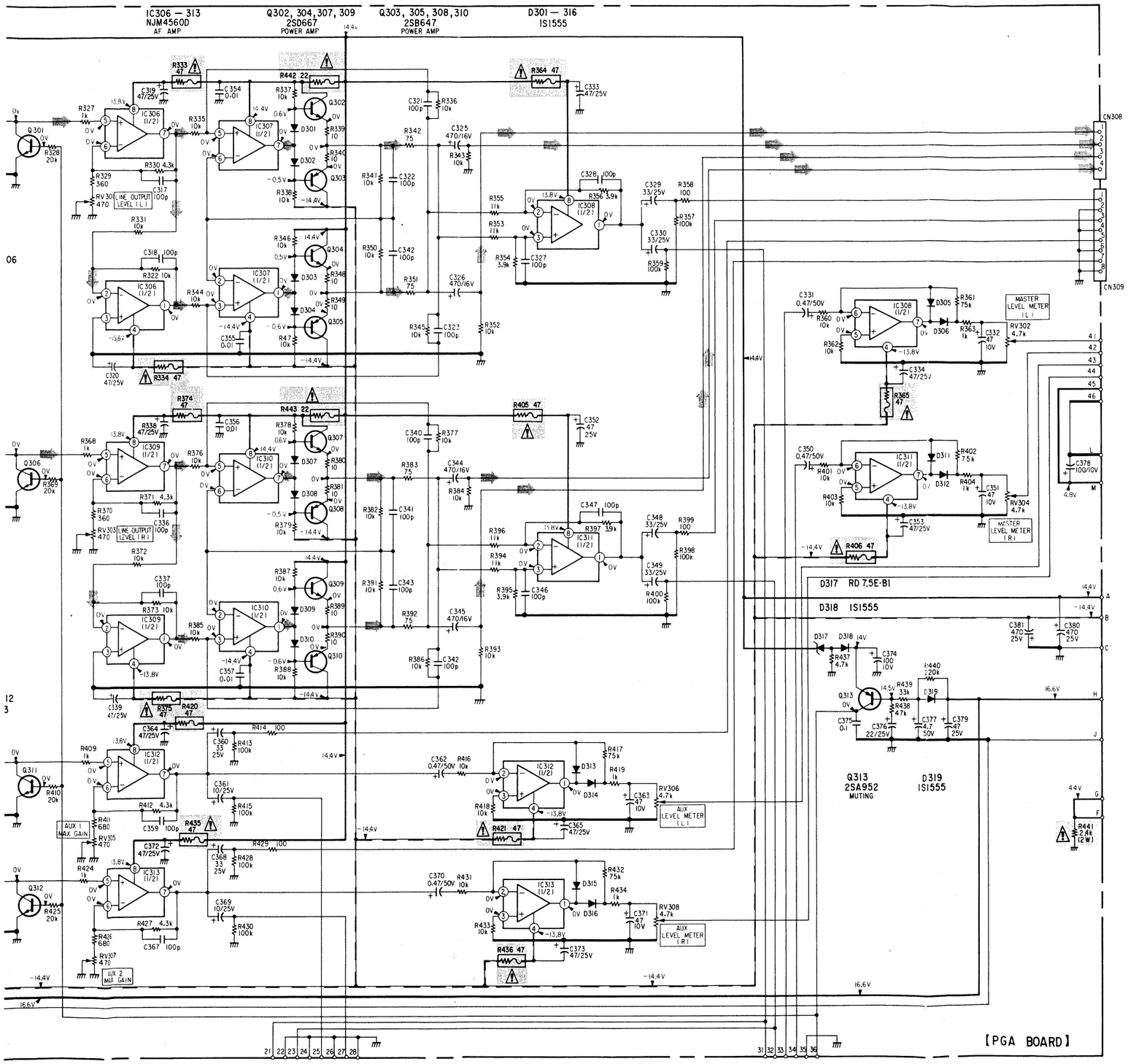


| | | |


【SLIDE SWITCH BOARD】
【PGA BOARD】
AUX
J102-6 -R-
J102-5 -L-
CN309
CN407 -R-
CN406 -L-
LINE OUT
OUTPUT
CNJ308
J102-7 LINE -L-
J102-8 LINE -R-
S901-2
7-8 THROUGH
ON
OFF
TO HA-2 BOARD #1
TO HA-2 BOARD #2
J101-7 LINE INPUT 7
J101-8 LINE INPUT 8
TO MA BOARD
TO METER & PS BOARD
15/CONDUCTOR FLAT CABLE: BLK
CNJ301
CN301
CNJ302
(HA-1 BOARD #1 — #6)
(HA-2 ROARD #1, #2)
TO SUB IN BOARD, HPA BOARD.
MARKING : WHT (1, 6, 11 PIN)
TO DC — DC CONVERTOR BOARD
TO S106,206,306,406 506,606,706,806
TO METER & PS BOARD
(CHASSIS)
CNJ303
CNJ307
CNJ306
CNJ305
CNJ304
TO TB & OSC BOARD
RV311 AUX OUT 2
RV310 AUX OUT 1
RV309 MASTER

| | | |


IC306 – 313
NJM4560D
AF AMP
Q302, 304, 307, 309
2SD667
POWER AMP
Q303, 305, 308, 310
2SB647
POWER AMP
D301 – 316
1S1555
IC301 ~ 305
NJM4560D
AF AMP
Q301, 306
2SC1213
MUTING
Q311, 312
2SC1213
MUTING
Q313
2SA952
MUTING
D319
1S1555
D317 RD 7.5E-B1
D318 1S1555
RV309 MASTER 5k-A×2
RV310 AUX OUT 1 5k-A
RV311 AUX OUT 2 5k-A
RV305 470 AUX 1 MAX GAIN
RV307 470 AUX 2 MAX GAIN
RV303 470 LINE OUTPUT LEVEL (R)
RV304 4.7k MASTER LEVEL METER (R)
RV306 4.7k AUX LEVEL METER (L)
RV308 4.7k AUX LEVEL METER (R)
CN303
CN302
CONT
PFL
L
R
AUX 1
AUX 2
[PGA BOARD]



Note:

- All capacitors are in μF unless otherwise noted. pF : $\mu\mu$F 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, ¼ W unless otherwise noted. kΩ : 1000 Ω, MΩ : 1000 kΩ
- ▭ : panel designation.
- ▭ : adjustment for repair.
- ——: B+ bus.
- – – –: B– bus.
- Readings are taken under no-signal conditions with a VOM (50 kΩ/V).
- ▰ : signal path

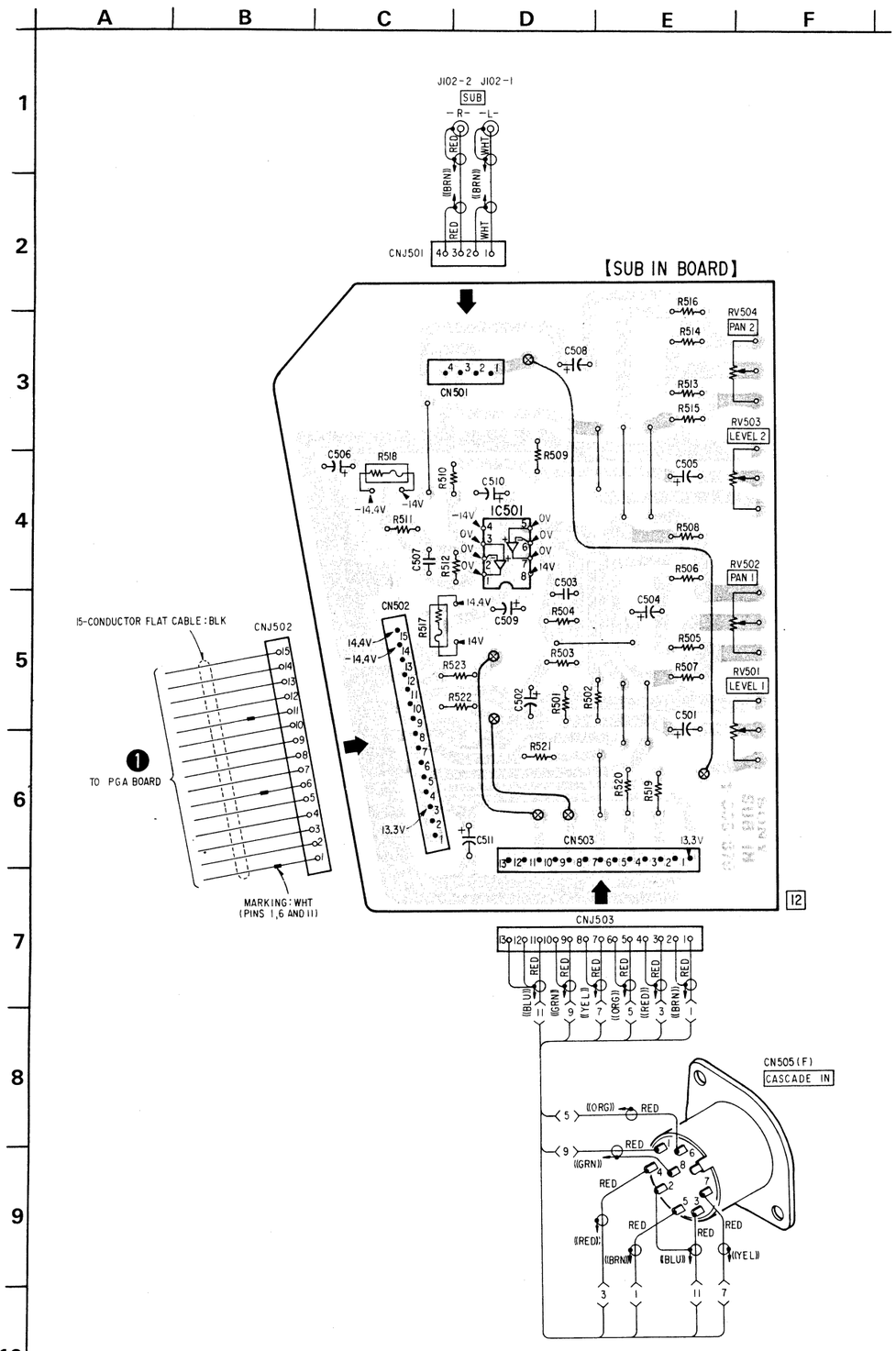
Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Note: Voltages are measured with a VOM (50kΩ/V).

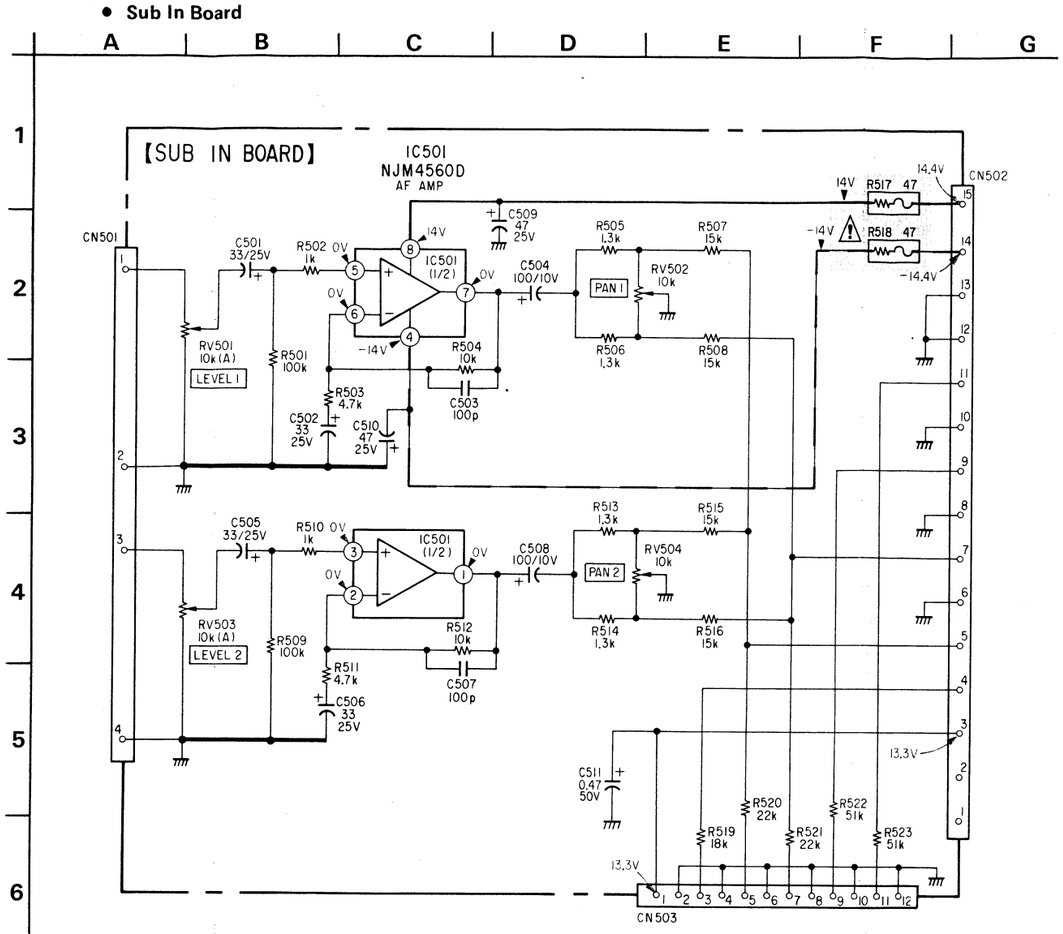
4-10. MOUNTING DIAGRAM (5)

- **Sub In Board**



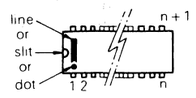
4-11. SCHEMATIC DIAGRAM (5)

- **Sub In Board**



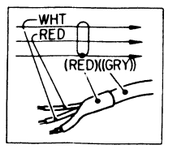
- **Semiconductor Lead Layouts**

NJM4560D



Note:

- Color code of sleeving over the end of the jacket.



- ○— : parts extracted from the component side.
- Ⓕ : fusible resistor.
- : B + pattern
- ⊗ : Through hole.

Note:

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, ¼ W unless otherwise noted. kΩ : 1000 Ω, MΩ : 1000 kΩ
- ▭ : panel designation.
- ——— : B+ bus.
- – – – : B- bus.
- Readings are taken under no-signal conditions with a VOM (50 kΩ/V).

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

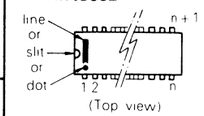
Note: Voltages are measured with a VOM (50kΩ/V).

4-12. MOUNTING DIAGRAM (6)

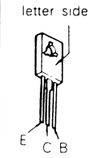
- **HPA Board**

- **Semiconductor Lead Layouts**

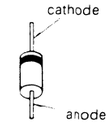
NJM4560D



2SB548
2SD414

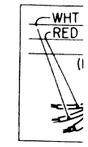


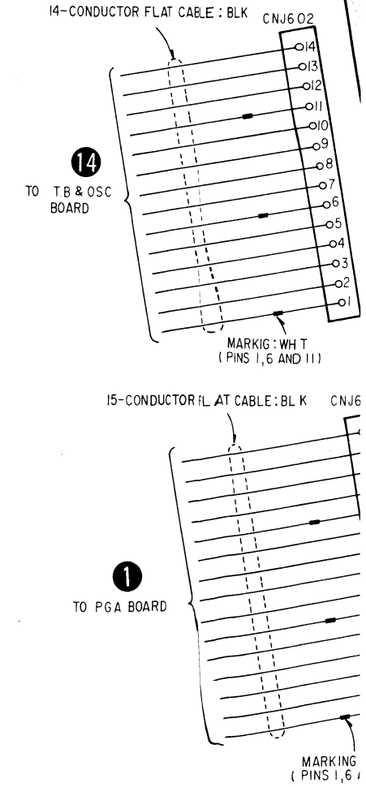
1S1555



Note:

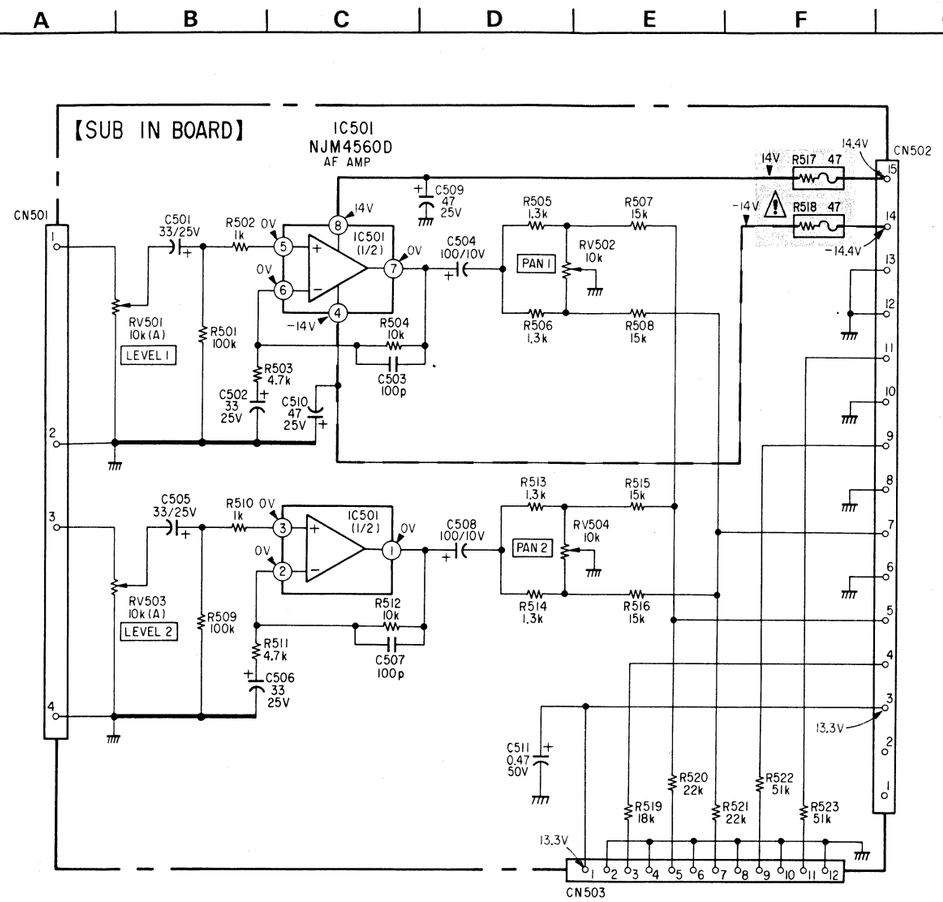
- Color co
- : pa
- : Th
- : B +





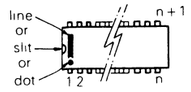
4-11. SCHEMATIC DIAGRAM (5)

- **Sub In Board**



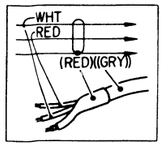
- **Semiconductor Lead Layouts**

NJM4560D



Note:

- Color code of sleeving over the end of the jacket.



- ○— : parts extracted from the component side.
- Ⓕ : fusible resistor.
- ▒▒ : B + pattern
- ⊗ : Through hole.

Note:

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, ¼ W unless otherwise noted. kΩ : 1000 Ω, MΩ : 1000 kΩ
- ▭ : panel designation.
- ——: B+ bus.
- – – –: B- bus.
- Readings are taken under no-signal conditions with a VOM (50 kΩ/V).

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

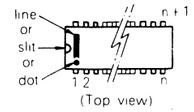
Note: Voltages are measured with a VOM (50kΩ/V).

4-12. MOUNTING DIAGRAM (6)

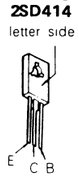
- **HPA Board**

- **Semiconductor Lead Layouts**

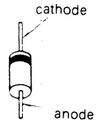
NJM4560D



2SB548 2SD414

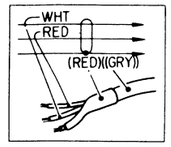


1S1555

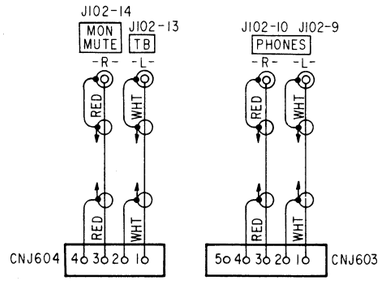


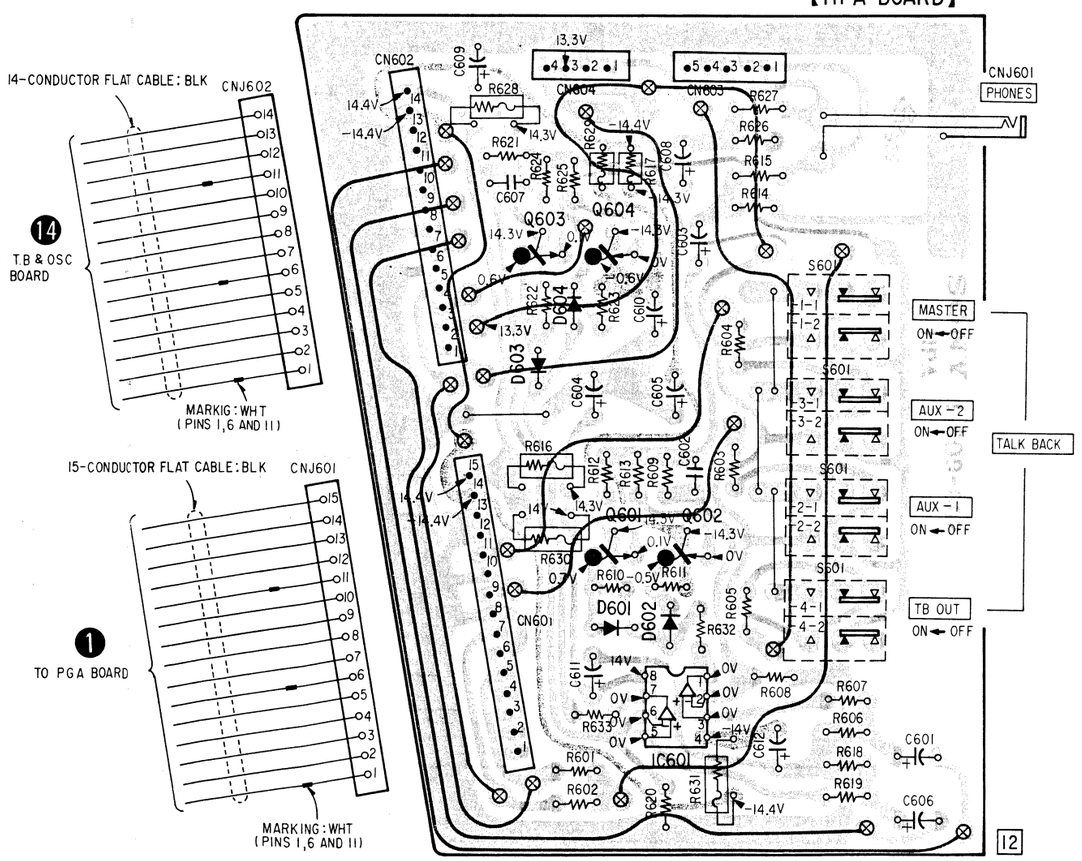
Note:

- Color code of sleeving over the end of the jacket.



- ○— : parts extracted from the component side.
- ⊗ : Through hole.
- ▒▒ : B + pattern

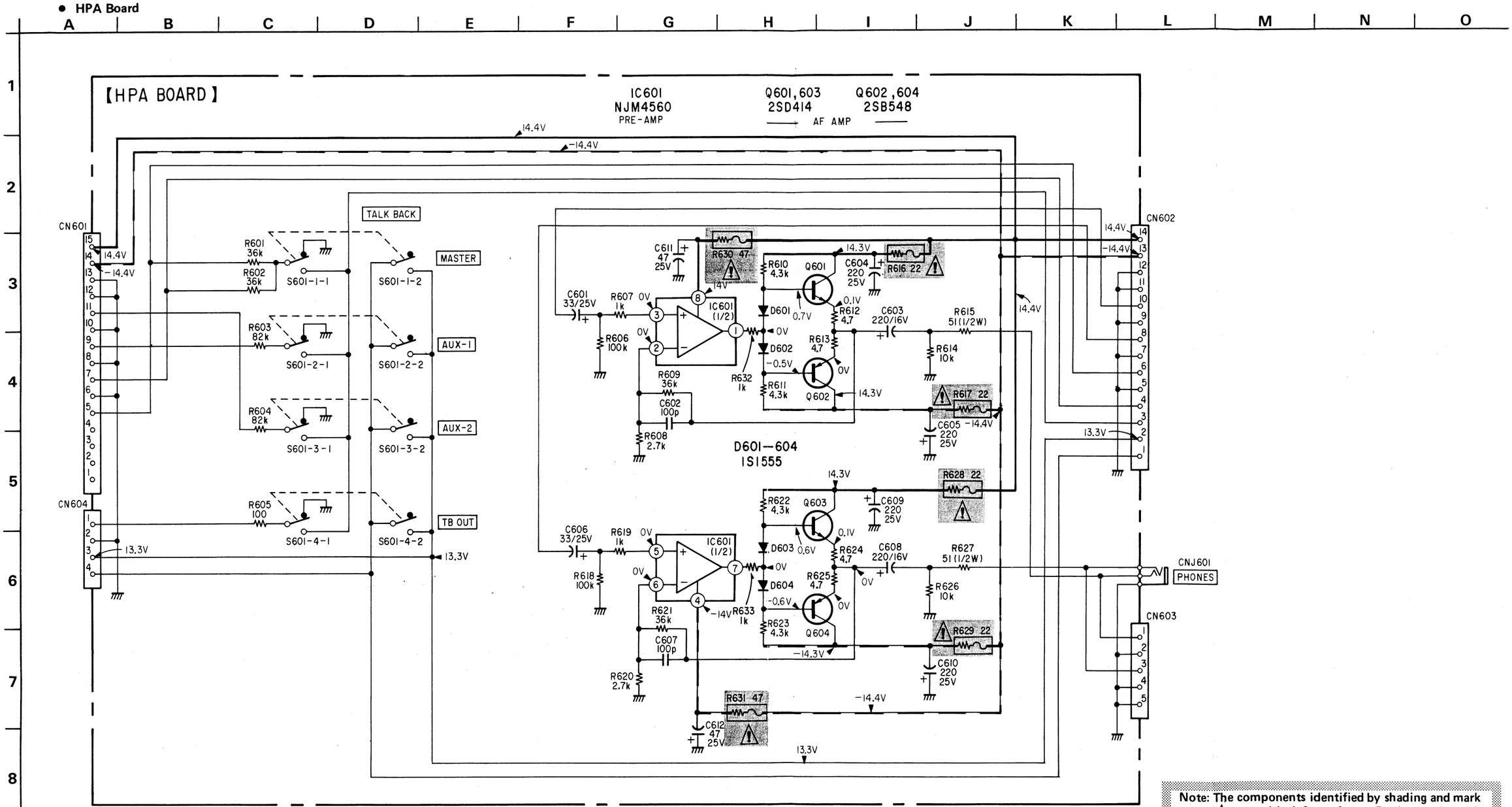




Q · IC	D
	604
603	603
	601,602
	602
	601
IC601	

4-13. SCHEMATIC DIAGRAM (6)

- HPA Board



Note:

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, ¼ W unless otherwise noted. kΩ : 1000 Ω, MΩ : 1000 kΩ
- ▭ : panel designation.
- ——: B+ bus.
- – – –: B- bus.
- Readings are taken under no-signal conditions with a VOM (50 kΩ/V).

- Switch

Ref. No.	Switch	Position
S601-1	TALK BACK MASTER	OFF
S601-2	TALK BACK AUX 1	OFF
S601-3	TALK BACK AUX 2	OFF
S601-4	TALK BACK TB OUT	OFF

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

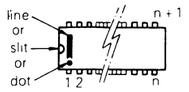
Note: Voltages are measured with a VOM (50kΩ/V).

4-14. MOUNTING DIAGRAM (7)

- TB & OSC Board

- Semiconductor Lead Layouts

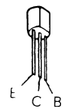
CX770A
NJM4560D



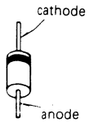
(Top view)

2SA952

2SC1364

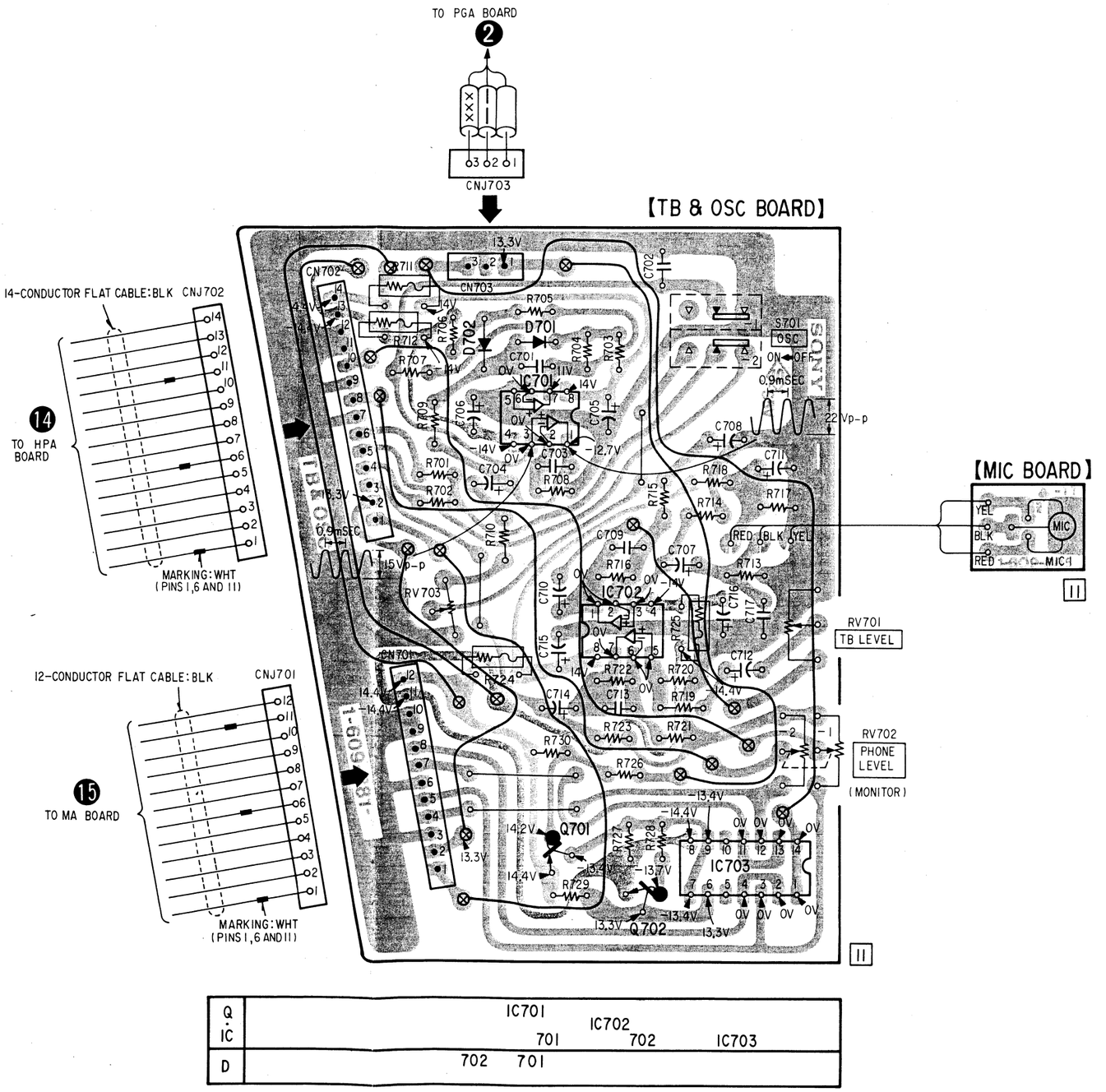


1S1555



Note:

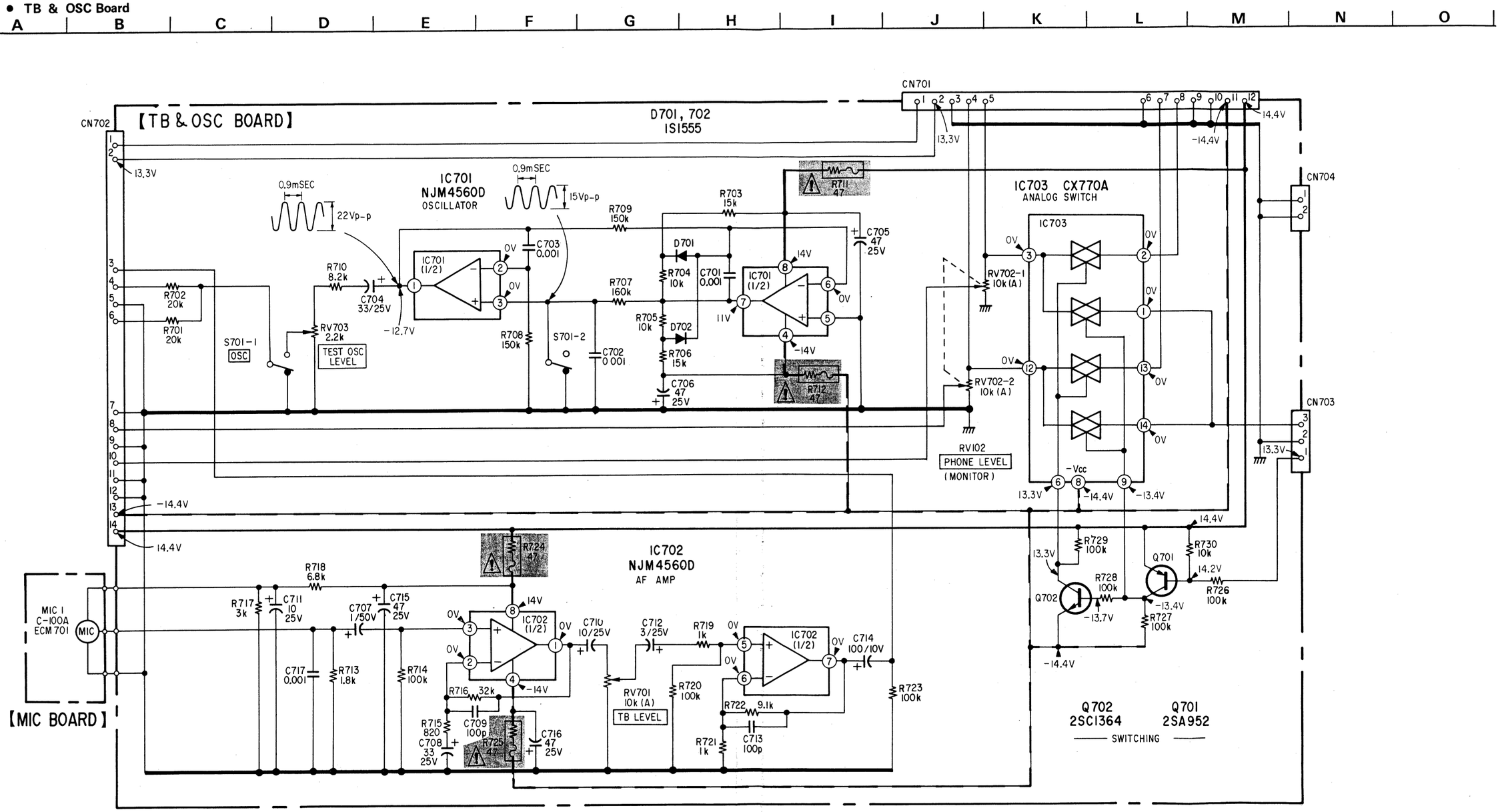
- ○— : parts extracted from the component side.
- ⊗ : Through hole.
- : B + pattern
- : B − pattern



Q・IC	IC701	IC702	IC703
		701 702	
D	702 701		

4-15. SCHEMATIC DIAGRAM (7)

- TB & OSC Board



Note:

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, ¼W unless otherwise noted. kΩ : 1000Ω, MΩ : 1000kΩ
- ▭ : panel designation.
- ▭ : adjustment for repair.
- ——: B+ bus.
- — — —: B- bus.
- Readings are taken under no-signal conditions with a VOM (50 kΩ/V).

- Switch

Ref. No.	Switch	Position
S701	OSC	OFF

Note: Voltages are measured with a VOM (50kΩ/V).

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

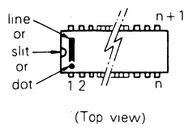
Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

4-16. MOUNTING DIAGRAM (8)

- **MA Board**

- **Semiconductor Lead Layouts**

CX770A
NJM4560D



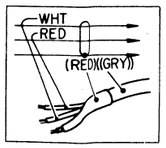
2SA952

2SC1213A

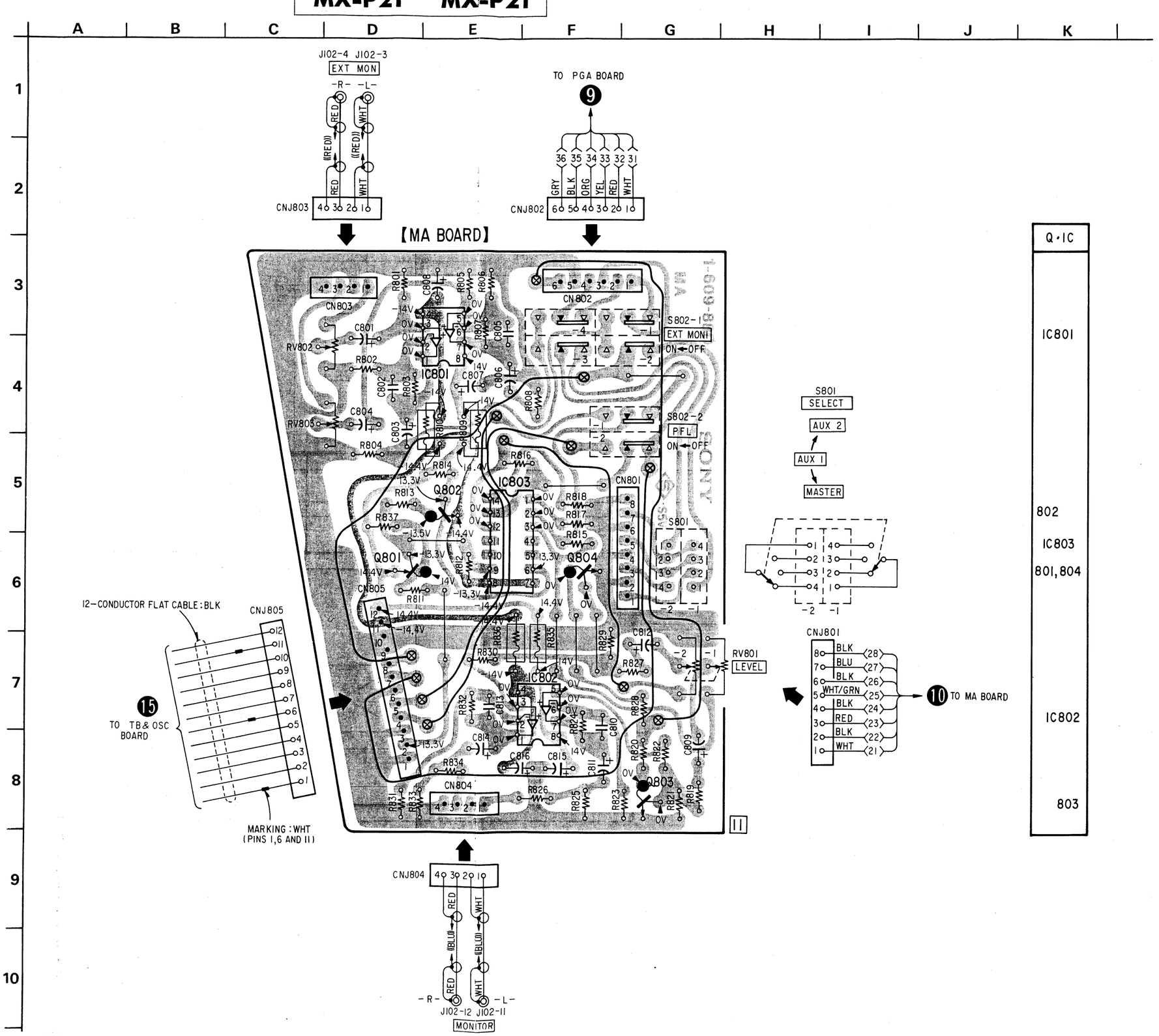
2SC1364

Note:

- Color code of sleeving over the end of the jacket.

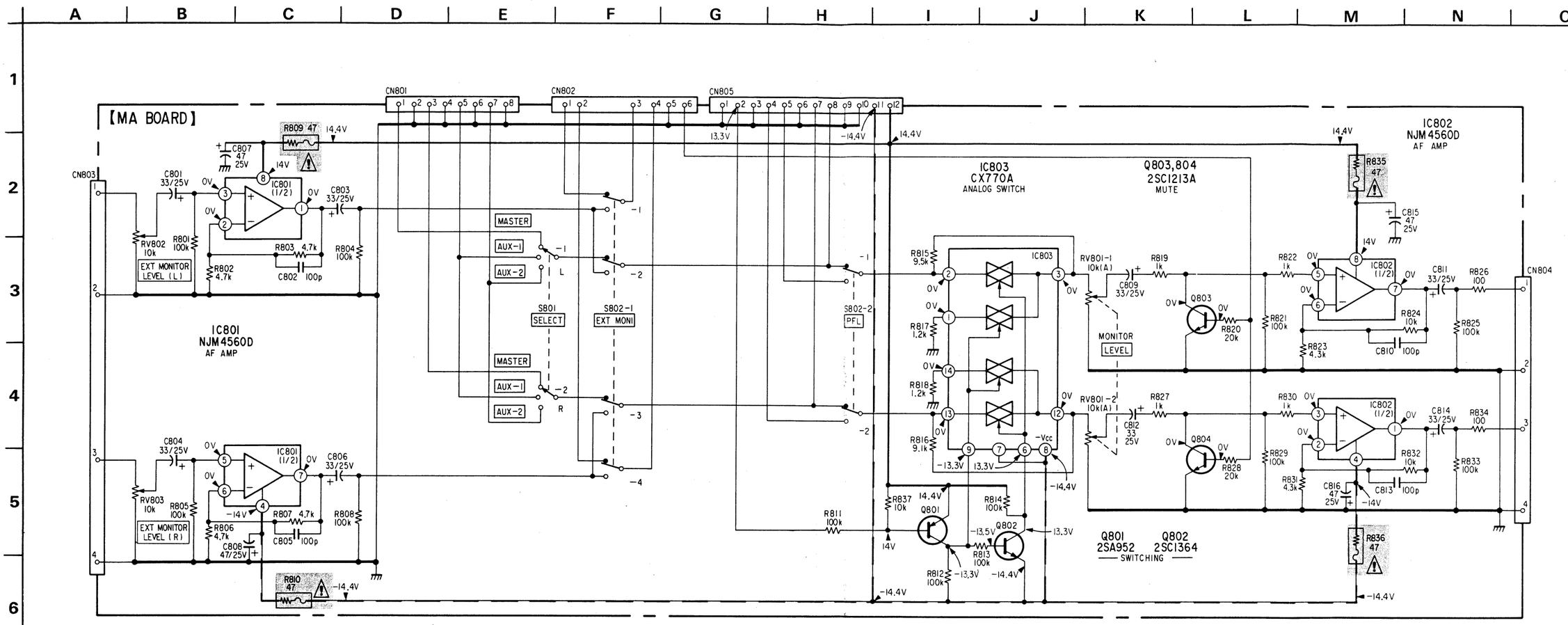


- ○—: parts extracted from the component side.
- ⊗ : Through hole.
- : B+ pattern
- : B- pattern



4-17. SCHEMATIC DIAGRAM (8)

- MA Board



Note:

- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, ¼W unless otherwise noted. kΩ : 1000Ω, MΩ : 1000kΩ
- ▭ : panel designation.
- ——: B+ bus.
- – – –: B- bus.
- Readings are taken under no-signal conditions with a VOM (50 kΩ/V).
- Switch

Ref. No.	Switch	Position
S801	SELECT	MASTER
S802-1	EXT MONI	OFF
S802-2	DFL	OFF

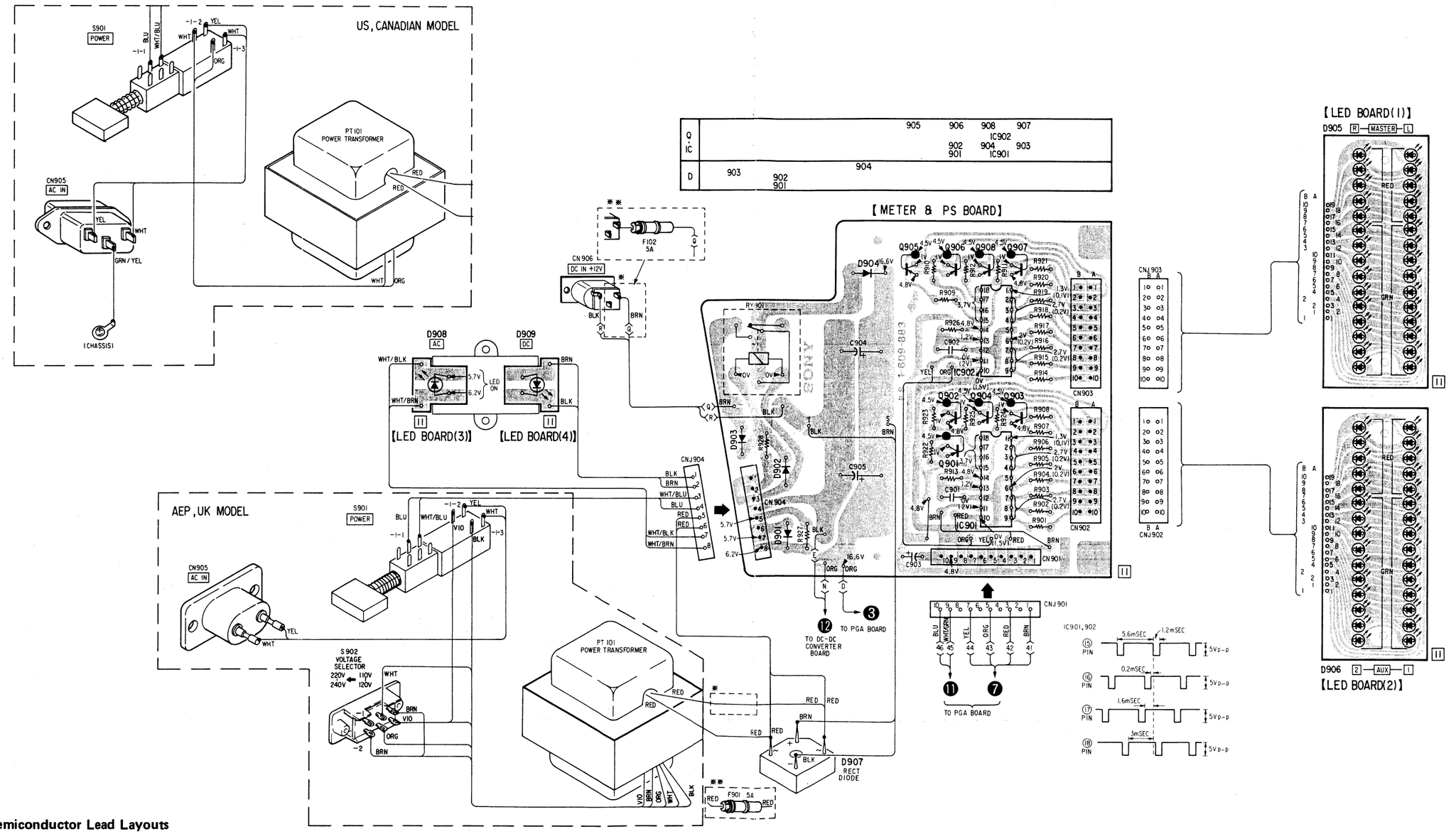
Note: Voltages are measured with a VOM (50kΩ/V).

Note: The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

4-18. MOUNTING DIAGRAM (9)

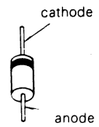
- LED Board, Meter and PS Board



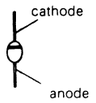
- Semiconductor Lead Layouts

2SA952

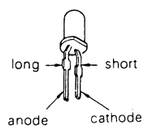
10E2



U05G



TLR124
TLG124



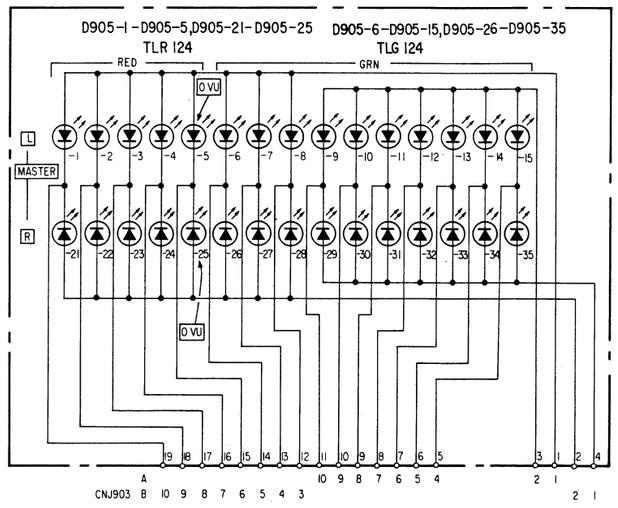
Note:

- ○—: parts extracted from the component side.
- ▒▒: B+ pattern
- * : (US) . . . . . Serial No. up to 820100
  (Canadian) . . . Serial No. up to 730000
  (AEP) . . . . . Serial No. up to 540100
  (UK) . . . . . Serial No. up to 660000
- ** : (US) . . . . . Serial No. 820101 and later
  (Canadian) . . . Serial No. 730001 and later
  (AEP) . . . . . Serial No. 540101 and later
  (UK) . . . . . Serial No. 660001 and later

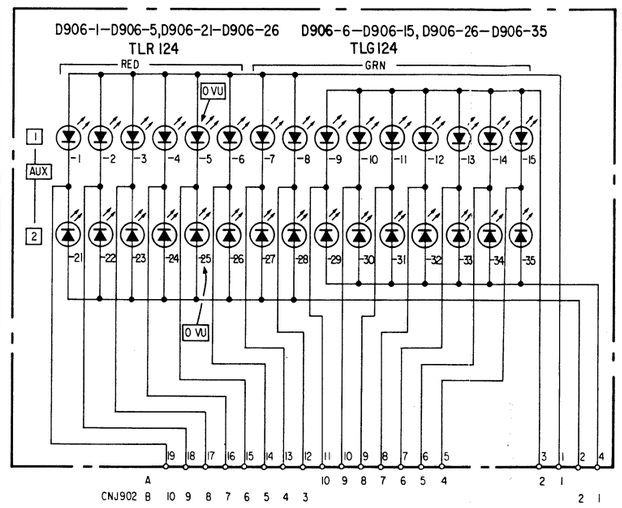
4-19. SCHEMATIC DIAGRAM (9)

- **LED Board, Meter and PS Board**

【LED BOARD (1)】



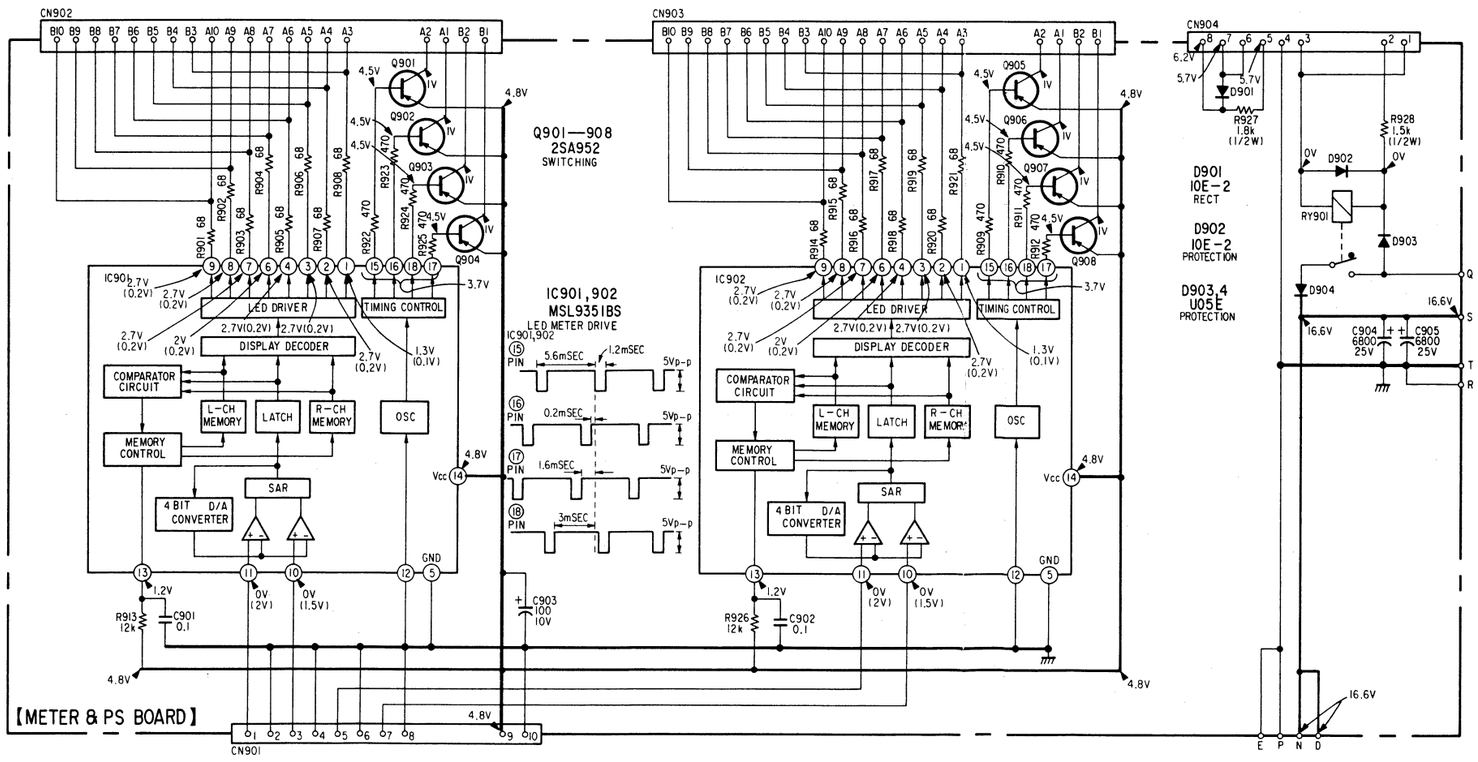
【LED BOARD (2)】



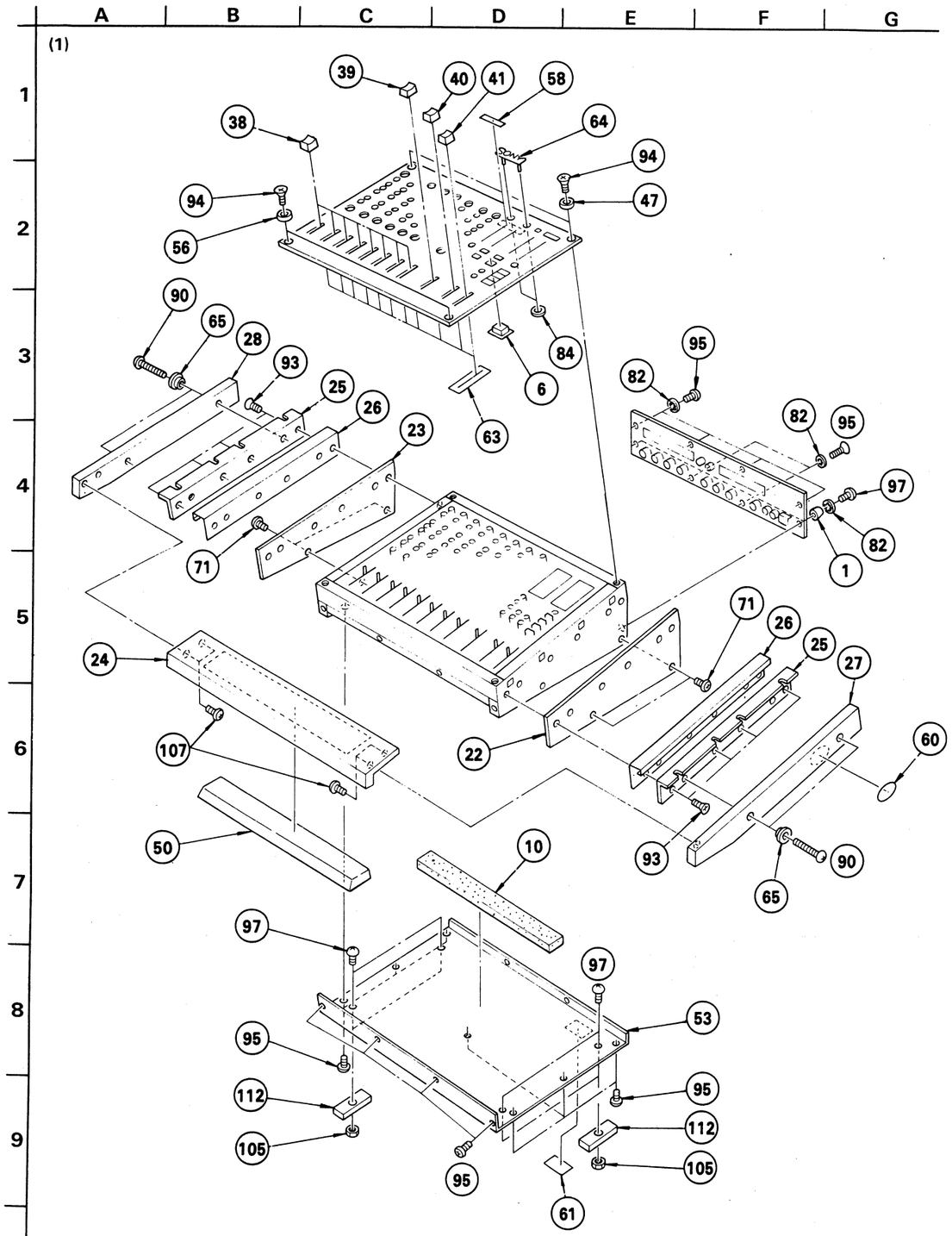
Note:

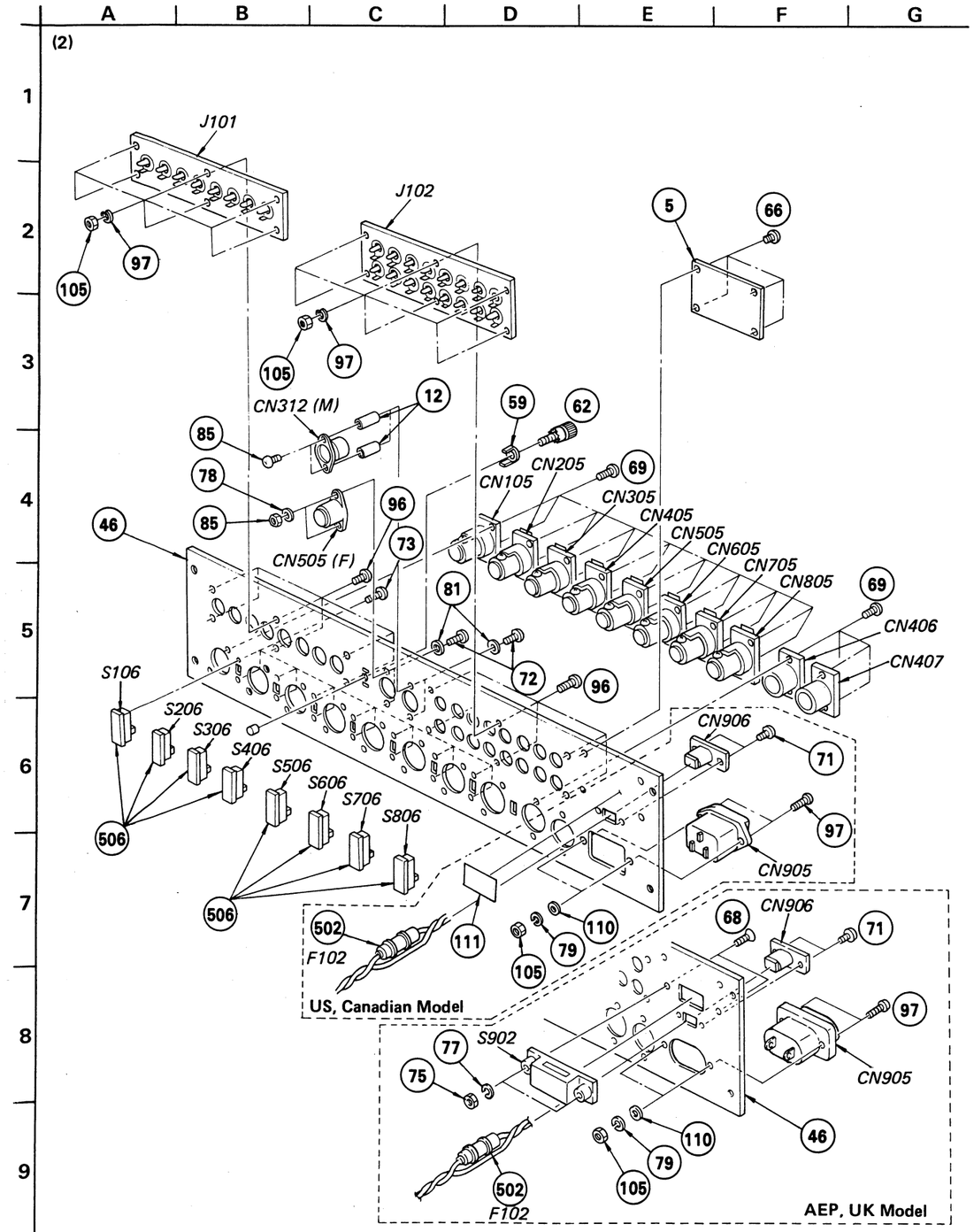
- All capacitors are in μF unless otherwise noted. pF : μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, ¼W unless otherwise noted. kΩ : 1000Ω, MΩ : 1000kΩ
- ▭ : panel designation.
- Readings are taken under no-signal conditions with a VOM (50 kΩ/V)

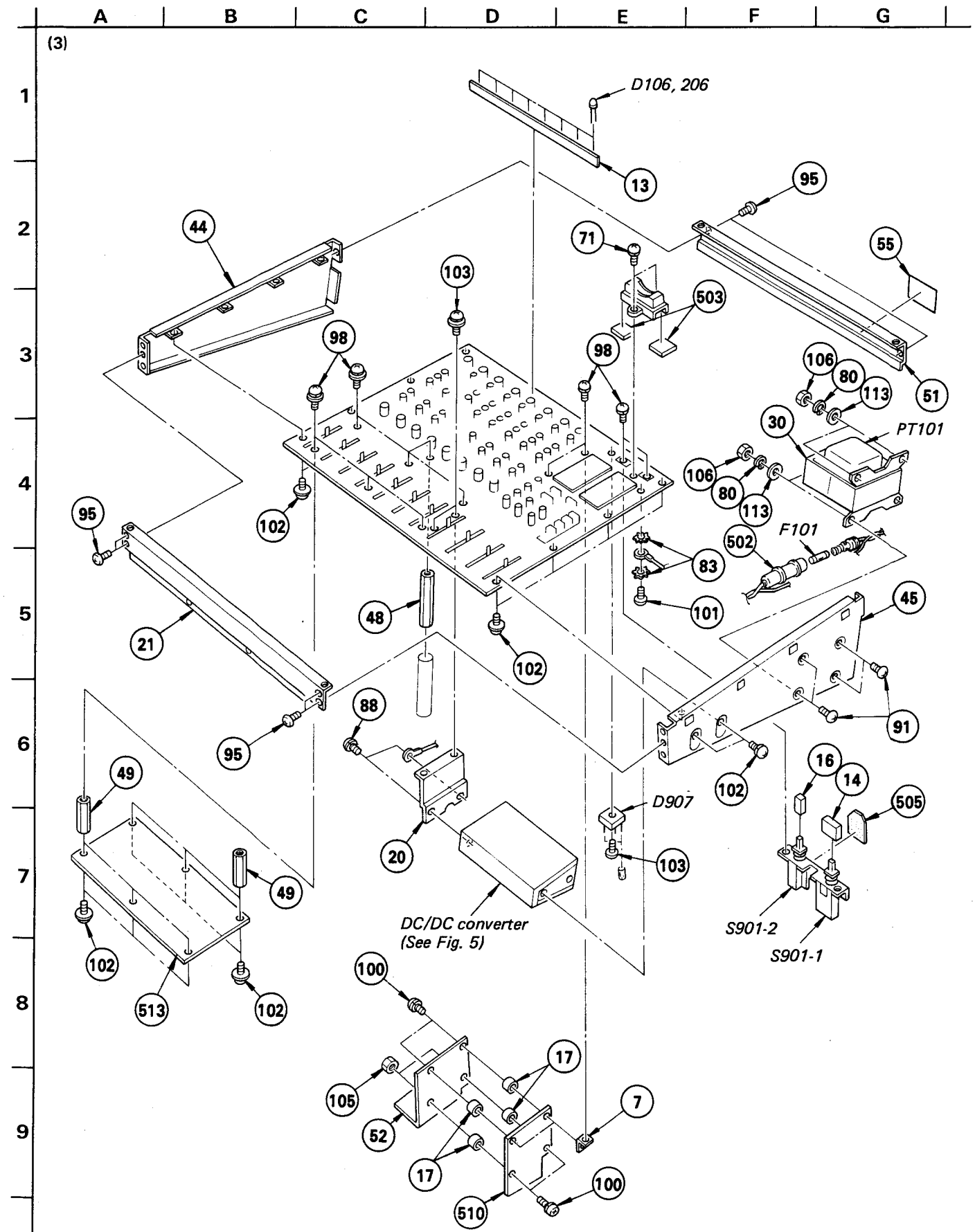
Note: Voltages are measured with a VOM (50kΩ/V).

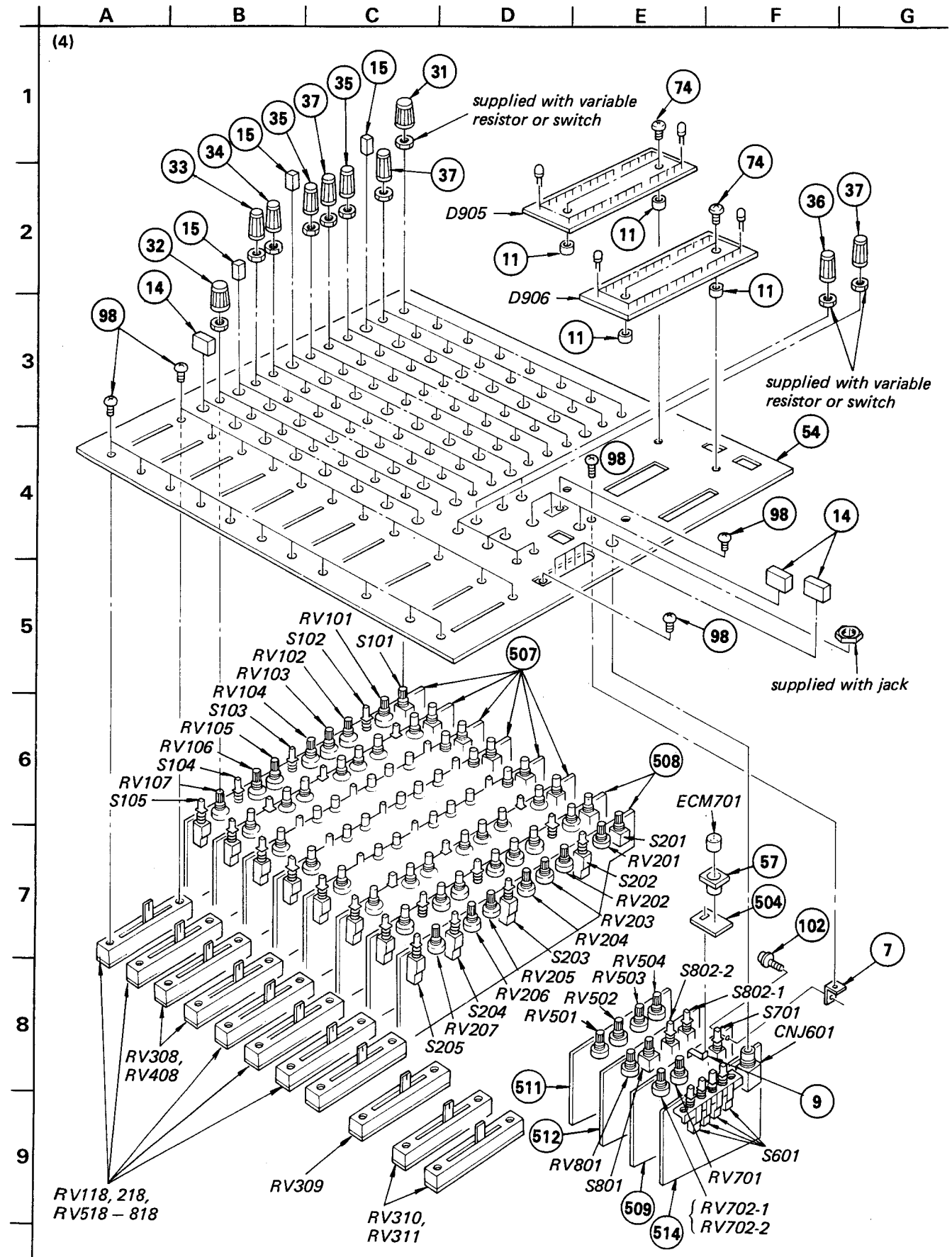


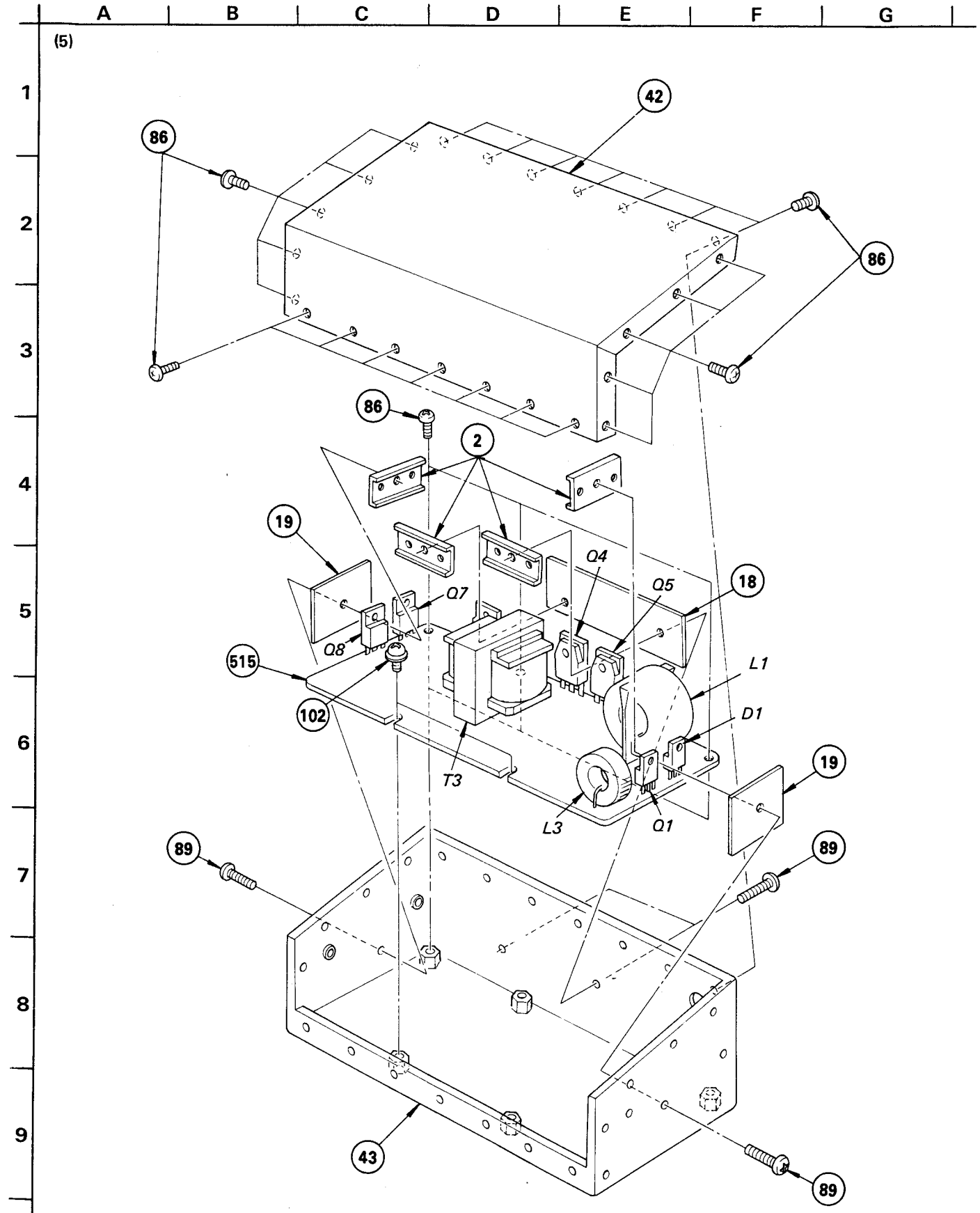
SECTION 5
EXPLODED VIEWS AND PARTS LIST






A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
10
(3)
D106, 206
13
95
44
71
55
503
103
98
98
106
80
113
51
30
PT101
106
80
113
95
102
F101
502
83
101
48
45
21
102
88
91
95
102
49
D907
16
14
505
20
103
49
DC/DC converter
(See Fig. 5)
S901-2
S901-1
102
513
102
100
17
105
7
52
17
100
510


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
10
(4)
supplied with variable resistor or switch
D905
D906
supplied with variable resistor or switch
supplied with jack
RV101
S102
S101
RV102
RV103
RV104
S103
RV105
RV106
S104
RV107
S105
RV308, RV408
RV118, 218, RV518 – 818
RV309
RV310, RV311
S205
RV207
S204
RV206
RV205
S203
RV204
RV203
RV202
S202
RV201
S201
ECM701
RV504
RV503
RV502
RV501
S802-2
S802-1
S701
CNJ601
S601
RV801
S801
RV701
RV702-1
RV702-2


A
B
C
D
E
F
G
1
2
3
4
5
6
7
8
9
10
(5)
42
86
86
86
2
19
Q4
Q5
18
Q7
Q8
515
102
L1
D1
T3
L3
Q1
19
89
89
89
43

GENERAL SECTION

No.	Part No.	Description
1	2-092-326-XX	FOOT, RUBBER
2 ♦	2-275-902-00	BRACKET, TRANSISTOR
3	.....	
4 ♦	2-280-403-00	(AEP,UK)....PANEL, CONNECTOR
5 ♦	2-380-401-00	(US,Canadian)...LABEL, MODEL NUMBER
5 ♦	2-380-402-00	(AEP,UK).....LABEL, MODEL NUMBER
6	2-380-404-00	GRILLE, MICROPHONE
7 ♦	2-380-405-00	BRACKET, PC BOARD
8	.....	
9 ♦	2-380-406-00	SUPPORT, MICROPHONE
10 ♦	2-380-407-00	CUSHION
11	2-380-408-00	COLLAR, LED
12 ♦	2-380-409-00	SPACER, DIN CONNECTOR
13 ♦	2-380-410-00	SPACER, LED
14	2-380-411-00	KNOB (LARGE), PUSH BUTTON
15	2-380-412-01	KNOB (SMALL), PUSH BUTTON
16	2-380-412-11	KNOB (SMALL), PUSH BUTTON
17	2-380-413-00	COLLAR, SHIELD PLATE
18	2-380-414-00	INSULATOR (A)
19	2-380-415-00	INSULATOR (B)
20 ♦	2-380-416-00	BRACKET, DDC
21 ♦	2-380-418-00	COVER, FRONT
22 ♦	2-380-419-01	COVER, SIDE
23 ♦	2-380-419-11	COVER, SIDE
24 ♦	2-380-420-00	TABLE
25 ♦	2-380-422-00	FRAME, MOUNT
26 ♦	2-380-423-00	COVER, MOUNT FRAME
27 ♦	2-380-424-00	PLATE (RIGHT), SIDE,ORNAMENTAL
28 ♦	2-380-425-00	PLATE (LEFT), SIDE, ORNAMENTAL
29 ♦	2-380-426-00	GRILLE, POWER SWITCH
30 ♦	2-380-427-00	FRAME, TRANSFORMER SHIELD
31	2-380-428-01	KNOB (LARGE), ROTARY
32	2-380-428-11	KNOB (LARGE), ROTARY
33	2-380-429-01	KNOB (SMALL), ROTARY
34	2-380-429-11	KNOB (SMALL), ROTARY
35	2-380-429-21	KNOB (SMALL), ROTARY
36	2-380-429-31	KNOB (SMALL), ROTARY
37	2-380-429-41	KNOB (SMALL), ROTARY
38	2-380-430-01	KNOB, SLIDE CONTROL
39	2-380-430-11	KNOB, SLIDE CONTROL
40	2-380-430-21	KNOB, SLIDE CONTROL
41	2-380-430-31	KNOB, SLIDE CONTROL
42 ♦	2-380-431-00	LID, CASE
43 ♦	2-380-432-00	CASE, ALUMINUM
44 ♦	2-380-433-00	FRAME (LEFT), SIDE
45 ♦	2-380-434-00	FRAME (RIGHT), SIDE

GENERAL SECTION

No.	Part No.	Description
46 ♦	2-380-435-00	(US,Canadian)...PANEL, CONNECTOR
47 ♦	2-380-436-00	PANEL, ORNAMENTAL
48 ♦	2-380-437-00	SUPPORT, BOTTOM PLATE
49 ♦	2-380-438-00	SUPPORT, PGA PC BOARD
50 ♦	2-380-440-00	SPACER
51 ♦	2-380-441-00	COVER, REAR
52 ♦	2-380-442-00	PLATE, SHIELD
53 ♦	2-380-443-00	PLATE, BOTTOM
54 ♦	2-380-444-00	CHASSIS
55 ♦	2-380-448-00	LABEL, CAUTION
56	3-451-111-41	WASHER (3 DIA.), ORNAMENTAL
57	3-574-761-00	HOLDER, MICROPHONE
58 ♦	3-701-690-00	(AEP,UK)...LABEL
59	3-701-993-00	SPACER, TERMINAL
60 ♦	3-703-276-00	(US,Canadian)...LABEL, MATERIAL
61	3-703-619-01	LABEL, MAIN CAUTION
62	3-706-165-00	SCREW
63	3-831-441-XX	COVER, DUST PROTECTION, CONTROL
64	4-836-828-00	EMBLEM, SONY
65	4-870-210-11	RING, PANEL RETAINER
66	7-621-255-10	SCREW +P 2X3
67	7-621-255-45	SCREW +P 2X6
68	7-621-555-70	SCREW +K 2X12
69	7-621-662-28	SCREW +RK 2.6X6
70	7-621-772-20	SCREW +B 2X5
71	7-621-772-30	SCREW +B 2X6
72	7-621-773-95	SCREW +B 2.6X6
73	7-621-775-10	SCREW +B 2.6X4
74	7-621-775-40	SCREW +B 2.6X8
75	7-622-205-05	N 2, TYPE 2
76	7-622-207-05	N 2.6, TYPE 2
77	7-623-205-22	SW 2, TYPE 2
78	7-623-207-22	SW 2.6, TYPE 2
79	7-623-208-22	SW 3, TYPE 2
80	7-623-210-22	SW 4, TYPE 2
81	7-623-307-07	LW 2.6, TYPE (A)
82	7-623-308-07	LW 3, TYPE (A)
83	7-623-423-07	(US,Canadian)....LW 4, TYPE B
84	7-624-190-81	STOP RING 2, TYPE-CS
85	7-628-254-15	SCREW +PS 2.6X6
86	7-682-145-01	SCREW +P 3X4
87	7-682-146-01	SCREW +P 3X5
88	7-682-148-01	SCREW +P 3X8
89	7-682-150-01	SCREW +P 3X12
90	7-682-155-09	SCREW +P 3X30

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- Items marked " ♦ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.
- If there are two or more same circuitsin a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:

MF:μF, PF:μμF.

RESISTORS

- All resistors are in ohms.
- F : nonflammable

COILS

- MMH : mH, UH : μH

SEMICONDUCTORS

In each case, U : μ, for example:
UA···: μA···, UPA···: μPA···, UPC···: μPC,
UPD···: μPD···

GENERAL SECTION

No.	Part No.	Description
91	7-682-162-01	SCREW +P 4X10
92	7-682-245-09	SCREW +K 3X4
93	7-682-249-09	SCREW +K 3X10
94	7-682-348-09	SCREW +RK 3X8
95	7-682-547-09	SCREW +B 3X6
96	7-682-548-09	SCREW +B 3X8
97	7-682-549-09	SCREW +B 3X10
98	7-682-647-01	SCREW +PS 3X6
99	7-682-648-01	SCREW +PS 3X8
100	7-682-649-01	SCREW +PS 3X10
101	7-682-660-01	SCREW +PS 4X6
102	7-682-947-01	SCREW +PSW 3X6
103	7-682-948-01	SCREW +PSW 3X8
104	7-682-950-09	SCREW +PSW 3X12
105	7-684-023-04	N 3, TYPE 2
106	7-684-024-04	N 4, TYPE 2
107	7-685-147-69	SCREW +P 3X10 TYPE4
108	7-685-647-01	(AEP)...SCREW +BVTP 3X10 TYPE 1
109	7-688-001-02	W 2, SMALL
110	7-688-003-01	(AEP,UK)...W 3, SMALL
111	9-911-863-XX	SHEET, INSULATING
112	X-4852-903-0	LEG ASSY
113	7-688-004-11	W 4

ACCESSORY & PACKING MATERIAL

No.	Part No.	Description
151	2-379-501-00	CUSHION (RIGHT)
152	2-379-501-00	CUSHION; RIGHT
153	2-379-502-00	CUSHION (LEFT)
154	2-379-502-00	CUSHION; LEFT
155	2-380-445-00	CARTON, INDIVIDUAL
156	2-380-446-00	SHEET, CUSHION
157	2-380-447-00	SPACER
158	3-551-895-00	BAG, PROTECTION
159	3-701-629-00	BAG, PLASTIC
160	3-701-630-00	BAG, PLASTIC
161	3-773-388-11	MANUAL, INSTRUCTION

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- Items marked " ♣ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part numbers (Δ-ΔΔΔ-ΔΔΔ-XX or Δ-ΔΔΔΔ-ΔΔΔ-X) may be different from those used in the set.
- If there are two or more same circuitsin a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:

MF:μF, PF:μμF.

RESISTORS

- All resistors are in ohms.
- F : nonflammable

COILS

- MMH : mH, UH : μH

SEMICONDUCTORS

In each case, U : μ, for example:
UA···: μA···, UPA···: μPA···, UPC···: μPC,
UPD···: μPD···

ELECTRICAL PARTS

Ref.No.	Part No.	Description
501	⚠1-551-218-00	(UK).....CORD, POWER (DK-50)
501	⚠1-551-812-00	(US,Canadian)...CORD, POWER
501	⚠1-555-234-00	(AEP).....CORD, POWER
502	⚠1-553-102-XX	(US).....SERIAL No.820101 AND LATER
		(Canadian)...SERIAL No.730001 AND LATER
		(AEP).....SERIAL No.540101 AND LATER
		(UK).....SERIAL No.660001 AND LATER
		HOLDER, FUSE
503	♦;1-609-884-00	PC BOARD, LED
504	♦;1-609-885-00	PC BOARD, MIC
505	♦;1-609-886-00	PC BOARD, SWITCH
506	♦;1-609-888-00	PC BOARD, SLIDE SWITCH
507	♦;A-4358-119-A	MOUNTED PCB, HA-1
508	♦;A-4358-120-A	MOUNTED PCB, HA-2
509	♦;A-4363-036-A	MOUNTED PCB, TB
510	♦;A-4380-047-A	MOUNTED PCB, METER
511	♦;A-4382-138-A	MOUNTED PCB, SUB
512	♦;A-4385-143-A	MOUNTED PCB, MA
513	♦;A-4385-144-A	MOUNTED PCB, PGA
514	♦;A-4385-145-A	MOUNTED PCB, HP
515	♦;A-4394-323-A	MOUNTED PCB, CONVERTER, DC DC
C001	1-108-227-00	CAP, PE TEREPHTHALATE 0.001MF
C002	1-108-227-00	CAP, PE TEREPHTHALATE 0.001MF
C003	1-108-227-00	CAP, PE TEREPHTHALATE 0.001MF
C004	1-108-227-00	CAP, PE TEREPHTHALATE 0.001MF
C005	1-108-227-00	CAP, PE TEREPHTHALATE 0.001MF
C006	1-108-227-00	CAP, PE TEREPHTHALATE 0.001MF
C007	1-108-227-00	CAP, PE TEREPHTHALATE 0.001MF
C008	1-108-227-00	CAP, PE TEREPHTHALATE 0.001MF
C1	1-108-599-00	MYLAR 0.068MF 5% 50V
C2	1-124-128-00	ELECT 470MF 20% 25V
C3	1-108-575-00	MYLAR 0.0068MF 5% 50V
C4	1-123-230-00	ELECT 2.2MF 20% 50V
C5	1-124-126-00	ELECT 47MF 20% 25V
C6	1-108-579-00	MYLAR 0.01MF 5% 50V
C7	1-124-128-00	ELECT 470MF 20% 25V
C8	1-124-126-00	ELECT 47MF 20% 25V
C9	1-108-595-00	MYLAR 0.047MF 5% 50V
C10	1-108-595-00	MYLAR 0.047MF 5% 50V
C11	1-124-130-00	ELECT 100MF 20% 63V
C12	1-124-130-00	ELECT 100MF 20% 63V
C13	1-124-368-00	ELECT 330MF 20% 63V
C14	1-124-367-00	ELECT 470MF 20% 10V
C15	1-124-123-00	ELECT 100MF 20% 10V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C16	1-123-876-00	ELECT	330MF	20%	25V
C17	1-123-876-00	ELECT	330MF	20%	25V
C18	1-124-128-00	ELECT	470MF	20%	25V
C19	1-124-128-00	ELECT	470MF	20%	25V
C20	1-124-127-00	ELECT	100MF	20%	25V
C21	1-124-127-00	ELECT	100MF	20%	25V
C22	1-124-126-00	ELECT	47MF	20%	25V
C23	1-124-126-00	ELECT	47MF	20%	25V
C24	1-124-125-00	ELECT	22MF	20%	25V
C101	1-123-357-00	ELECT	22MF	20%	50V
C102	1-123-357-00	ELECT	22MF	20%	50V
C103	1-108-563-00	MYLAR	0.0022MF	5%	50V
C104	1-107-085-00	MICA	100PF	5%	50V
C105	1-107-085-00	MICA	100PF	5%	50V
C106	1-123-309-00	ELECT	330MF	20%	10V
C107	1-107-085-00	MICA	100PF	5%	50V
C108	1-123-307-00	ELECT	100MF	20%	10V
C109	1-123-332-00	ELECT	47MF	20%	25V
C110	1-123-332-00	ELECT	47MF	20%	25V
C111	1-123-713-00	ELECT	10MF	20%	50V
C112	1-108-583-00	MYLAR	0.015MF	5%	50V
C113	1-108-569-00	MYLAR	0.0039MF	5%	50V
C114	1-107-096-00	MICA	300PF	5%	50V
C115	1-123-307-00	ELECT	100MF	20%	10V
C116	1-123-307-00	ELECT	100MF	20%	10V
C117	1-108-579-00	MYLAR	0.01MF	5%	50V
C118	1-108-579-00	MYLAR	0.01MF	5%	50V
C119	1-107-069-00	MICA	22PF	5%	50V
C120	1-107-069-00	MICA	22PF	5%	50V
C121	1-123-307-00	ELECT	100MF	20%	10V
C122	1-123-307-00	ELECT	100MF	20%	10V
C123	1-123-343-00	ELECT	33MF	20%	25V
C124	1-123-307-00	ELECT	100MF	20%	10V
C125	1-107-085-00	MICA	100PF	5%	50V
C126	1-123-307-00	ELECT	100MF	20%	10V
C127	1-108-583-00	MYLAR	0.015MF	5%	50V
C128	1-108-589-00	MYLAR	0.027MF	5%	50V
C129	1-108-575-00	MYLAR	0.0068MF	5%	50V
C130	1-123-308-00	ELECT	220MF	20%	10V
C131	1-108-603-00	MYLAR	0.1MF	5%	50V
C132	1-108-579-00	MYLAR	0.01MF	5%	50V
C133	1-108-579-00	MYLAR	0.01MF	5%	50V
C134	1-123-343-00	ELECT	33MF	20%	25V
C135	1-123-307-00	ELECT	100MF	20%	10V
C136	1-107-085-00	MICA	100PF	5%	50V

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MF:μF, PF:μμF.

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- All resistors are in ohms.
- F : nonflammable

COILS
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SEMICONDUCTORS
In each case, U : μ, for example:
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The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une trame et une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C137	1-123-307-00	ELECT	100MF	20%	10V
C138	1-108-579-00	MYLAR	0.01MF	5%	50V
C139	1-108-579-00	MYLAR	0.01MF	5%	50V
C140	1-123-332-00	ELECT	47MF	20%	25V
C141	1-123-332-00	ELECT	47MF	20%	25V
C142	1-123-356-00	ELECT	10MF	20%	25V
C143	1-123-380-00	ELECT	1MF	20%	50V
C144	1-123-333-00	ELECT	100MF	20%	25V
		(US).....SERIAL No. UP TO 820100			
		(Canadian)...SERIAL No. UP TO 730000			
		(AEP).....SERIAL No. UP TO 540100			
		(UK).....SERIAL No. UP TO 660000			
C201	1-123-357-00	ELECT	22MF	20%	50V
C202	1-123-357-00	ELECT	22MF	20%	50V
C203	1-108-563-00	MYLAR	0.0022MF	5%	50V
C204	1-107-085-00	MICA	100PF	5%	50V
C205	1-107-085-00	MICA	100PF	5%	50V
C206	1-123-309-00	ELECT	330MF	20%	10V
C207	1-107-085-00	MICA	100PF	5%	50V
C208	1-123-307-00	ELECT	100MF	20%	10V
C209	1-123-332-00	ELECT	47MF	20%	25V
C210	1-123-332-00	ELECT	47MF	20%	25V
C211	1-123-713-00	ELECT	10MF	20%	50V
C212	1-123-307-00	ELECT	100MF	20%	10V
C213	1-108-579-00	MYLAR	0.01MF	5%	50V
C214	1-108-579-00	MYLAR	0.01MF	5%	50V
C215	1-107-069-00	MICA	22PF	5%	50V
C216	1-107-069-00	MICA	22PF	5%	50V
C217	1-123-307-00	ELECT	100MF	20%	10V
C218	1-123-307-00	ELECT	100MF	20%	10V
C219	1-123-343-00	ELECT	33MF	20%	25V
C220	1-123-307-00	ELECT	100MF	20%	10V
C221	1-107-085-00	MICA	100PF	5%	50V
C222	1-123-307-00	ELECT	100MF	20%	10V
C223	1-108-583-00	MYLAR	0.015MF	5%	50V
C224	1-108-589-00	MYLAR	0.027MF	5%	50V
C225	1-108-575-00	MYLAR	0.0068MF	5%	50V
C226	1-123-308-00	ELECT	220MF	20%	10V
C227	1-108-603-00	MYLAR	0.1MF	5%	50V
C228	1-108-579-00	MYLAR	0.01MF	5%	50V
C229	1-108-579-00	MYLAR	0.01MF	5%	50V
C230	1-123-343-00	ELECT	33MF	20%	25V
C231	1-123-307-00	ELECT	100MF	20%	10V
C232	1-107-085-00	MICA	100PF	5%	50V
C233	1-123-307-00	ELECT	100MF	20%	10V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C234	1-108-579-00	MYLAR	0.01MF	5%	50V
C235	1-108-579-00	MYLAR	0.01MF	5%	50V
C236	1-123-332-00	ELECT	47MF	20%	25V
C237	1-123-332-00	ELECT	47MF	20%	25V
C238	1-123-356-00	ELECT	10MF	20%	25V
C239	1-123-380-00	ELECT	1MF	20%	50V
C240	1-123-333-00	ELECT	100MF	20%	25V
		(US).....SERIAL No. UP TO 820100			
		(Canadian)...SERIAL No. UP TO 730000			
		(AEP).....SERIAL No. UP TO 540100			
		(UK).....SERIAL No. UP TO 660000			
C301	1-123-308-00	ELECT	220MF	20%	10V
C302	1-107-085-00	MICA	100PF	5%	50V
C303	1-123-356-00	ELECT	10MF	20%	16V
C304	1-123-308-00	ELECT	220MF	20%	10V
C305	1-107-085-00	MICA	100PF	5%	50V
C306	1-123-356-00	ELECT	10MF	20%	16V
C307	1-123-308-00	ELECT	220MF	20%	10V
C308	1-107-085-00	MICA	100PF	5%	50V
C309	1-123-356-00	ELECT	10MF	20%	16V
C310	1-123-308-00	ELECT	220MF	20%	10V
C311	1-107-085-00	MICA	100PF	5%	50V
C312	1-123-356-00	ELECT	10MF	20%	16V
C313	1-123-308-00	ELECT	220MF	20%	10V
C314	1-107-085-00	MICA	100PF	5%	50V
C315	1-123-356-00	ELECT	10MF	20%	16V
C316	1-123-343-00	ELECT	33MF	20%	25V
C317	1-107-085-00	MICA	100PF	5%	50V
C318	1-107-085-00	MICA	100PF	5%	50V
C319	1-123-332-00	ELECT	47MF	20%	25V
C320	1-123-332-00	ELECT	47MF	20%	25V
C321	1-107-085-00	MICA	100PF	5%	50V
C322	1-107-085-00	MICA	100PF	5%	50V
C323	1-107-085-00	MICA	100PF	5%	50V
C324	1-107-085-00	MICA	100PF	5%	50V
C325	1-123-323-00	ELECT	470MF	20%	16V
C326	1-123-323-00	ELECT	470MF	20%	16V
C327	1-107-085-00	MICA	100PF	5%	50V
C328	1-107-085-00	MICA	100PF	5%	50V
C329	1-123-331-00	ELECT	33MF	20%	25V
C330	1-123-331-00	ELECT	33MF	20%	25V
C331	1-123-379-00	ELECT	0.47MF	20%	50V
C332	1-123-306-00	ELECT	47MF	20%	10V
C333	1-123-332-00	ELECT	47MF	20%	25V
C334	1-123-332-00	ELECT	47MF	20%	25V
C335	1-123-331-00	ELECT	33MF	20%	25V
C344	1-123-323-00	ELECT	470MF	20%	16V

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ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C345	1-123-323-00	ELECT	470MF	20%	16V
C346	1-107-085-00	MICA	100PF	5%	50V
C347	1-107-085-00	MICA	100PF	5%	50V
C348	1-123-343-00	ELECT	33MF	20%	25V
C349	1-123-343-00	ELECT	33MF	20%	25V
C350	1-123-379-00	ELECT	0.47MF	20%	50V
C351	1-123-306-00	ELECT	47MF	20%	10V
C352	1-123-332-00	ELECT	47MF	20%	25V
C353	1-123-332-00	ELECT	47MF	20%	25V
C354	1-108-579-00	MYLAR	0.01MF	5%	50V
C355	1-108-579-00	MYLAR	0.01MF	5%	50V
C356	1-108-579-00	MYLAR	0.01MF	5%	50V
C357	1-108-579-00	MYLAR	0.01MF	5%	50V
C358	1-123-343-00	ELECT	33MF	20%	25V
C359	1-107-085-00	MICA	100PF	5%	50V
C360	1-123-343-00	ELECT	33MF	20%	25V
C361	1-123-356-00	ELECT	10MF	20%	25V
C362	1-123-379-00	ELECT	0.47MF	20%	50V
C363	1-123-306-00	ELECT	47MF	20%	10V
C364	1-123-332-00	ELECT	47MF	20%	25V
C365	1-123-332-00	ELECT	47MF	20%	25V
C366	1-123-343-00	ELECT	33MF	20%	25V
C367	1-107-085-00	MICA	100PF	5%	50V
C368	1-123-343-00	ELECT	33MF	20%	25V
C369	1-123-356-00	ELECT	10MF	20%	25V
C370	1-123-379-00	ELECT	0.47MF	20%	50V
C371	1-123-306-00	ELECT	47MF	20%	10V
C372	1-123-332-00	ELECT	47MF	20%	25V
C373	1-108-579-00	MYLAR	0.01MF	5%	50V
C374	1-123-307-00	ELECT	100MF	20%	10V
C375	1-108-603-00	MYLAR	0.1MF	5%	50V
C376	1-123-330-00	ELECT	22MF	20%	25V
C377	1-123-369-00	ELECT	4.7MF	20%	50V
C378	1-123-307-00	ELECT	100MF	20%	10V
C379	1-123-332-00	ELECT	47MF	20%	25V
C380	1-123-336-00	ELECT	470MF	20%	25V
C381	1-123-336-00	ELECT	470MF	20%	25V
C382	1-123-333-00	ELECT	100MF	20%	25V
C383	1-123-333-00	ELECT	100MF	20%	25V
C501	1-123-343-00	ELECT	33MF	20%	25V
C502	1-123-343-00	ELECT	33MF	20%	25V
C503	1-107-085-00	MICA	100PF	5%	50V
C504	1-123-307-00	ELECT	100MF	20%	10V
C505	1-123-343-00	ELECT	33MF	20%	25V
C506	1-123-343-00	ELECT	33MF	20%	25V
C507	1-107-085-00	MICA	100PF	5%	50V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C508	1-123-307-00	ELECT	100MF	20%	10V
C509	1-123-332-00	ELECT	47MF	20%	25V
C510	1-123-332-00	ELECT	47MF	20%	25V
C511	1-123-379-00	ELECT	0.47MF	20%	50V
C601	1-123-343-00	ELECT	33MF	20%	25V
C602	1-107-085-00	MICA	100PF	5%	50V
C603	1-123-321-00	ELECT	220MF	20%	16V
C604	1-123-334-00	ELECT	220MF	20%	25V
C605	1-123-334-00	ELECT	220MF	20%	25V
C606	1-123-343-00	ELECT	33MF	20%	25V
C607	1-107-085-00	MICA	100PF	5%	50V
C608	1-123-321-00	ELECT	220MF	20%	16V
C609	1-123-334-00	ELECT	220MF	20%	25V
C610	1-123-334-00	ELECT	220MF	20%	25V
C611	1-123-332-00	ELECT	47MF	20%	25V
C612	1-123-332-00	ELECT	47MF	20%	25V
C701	1-108-555-00	MYLAR	0.001MF	5%	50V
C702	1-108-555-00	MYLAR	0.001MF	5%	50V
C703	1-108-555-00	MYLAR	0.001MF	5%	50V
C704	1-123-343-00	ELECT	33MF	20%	25V
C707	1-123-380-00	ELECT	1MF	20%	50V
C708	1-123-343-00	ELECT	33MF	20%	25V
C709	1-107-085-00	MICA	100PF	5%	50V
C710	1-123-356-00	ELECT	10MF	20%	25V
C711	1-123-356-00	ELECT	10MF	20%	25V
C712	1-123-343-00	ELECT	33MF	20%	25V
C713	1-107-085-00	MICA	100PF	5%	50V
C714	1-123-307-00	ELECT	100MF	20%	10V
C715	1-123-332-00	ELECT	47MF	20%	25V
C716	1-123-332-00	ELECT	47MF	20%	25V
C717	1-108-227-00	MYLAR	0.001MF	10%	50V
C801	1-123-343-00	ELECT	33MF	20%	25V
C802	1-107-085-00	MICA	100PF	5%	50V
C803	1-123-343-00	ELECT	33MF	20%	25V
C804	1-123-343-00	ELECT	33MF	20%	25V
C805	1-107-085-00	MICA	100PF	5%	50V
C806	1-123-343-00	ELECT	33MF	20%	25V
C807	1-123-332-00	ELECT	47MF	20%	25V
C808	1-123-332-00	ELECT	47MF	20%	25V
C809	1-123-343-00	ELECT	33MF	20%	25V
C810	1-107-085-00	MICA	100PF	5%	50V
C811	1-123-343-00	ELECT	33MF	20%	25V
C812	1-123-343-00	ELECT	33MF	20%	25V
C813	1-107-085-00	MICA	100PF	5%	50V
C814	1-123-343-00	ELECT	33MF	20%	25V

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ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C815	1-123-332-00	ELECT	47MF	20%	25V
C816	1-123-332-00	ELECT	47MF	20%	25V
C901	1-108-603-00	MYLAR	0.1MF	5%	50V
C902	1-108-603-00	MYLAR	0.1MF	5%	50V
C903	1-123-307-00	ELECT	100MF	20%	10V
C904	1-125-266-00	ELECT(BLOCK)	6800MF	99%	25V
C905	1-125-266-00	ELECT(BLOCK)	6800MF	99%	25V
CN101♣	1-560-278-00	PLUG, CONNECTOR 7P			
CN102♣	1-564-250-00	PIN, CONNECTOR 15P			
CN103♣	1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P			
CN115	1-562-299-00	CONNECTOR (RECEPTACLE)			
CN201♣	1-560-278-00	PLUG, CONNECTOR 7P			
CN202♣	1-564-250-00	PIN, CONNECTOR 15P			
CN203♣	1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P			
CN215	1-562-299-00	CONNECTOR (RECEPTACLE)			
CN301♣	1-564-250-00	PIN, CONNECTOR 15P			
CN302♣	1-564-248-00	PIN, CONNECTOR 12P			
CN303♣	1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P			
CN304♣	1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P			
CN305♣	1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P			
CN306♣	1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P			
CN307♣	1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P			
CN308♣	1-560-124-00	PLUG, CONNECTOR (2.5MM) 4P			
CN309♣	1-560-128-00	PLUG, CONNECTOR (2.5MM PITCH)			
CN312M	1-564-255-00	PLUG, DIN 8P			
CN315	1-562-299-00	CONNECTOR (RECEPTACLE)			
CN406	1-564-256-00	CONNECTOR (RECEPTACLE)			
CN407	1-564-256-00	CONNECTOR (RECEPTACLE)			
CN415	1-562-299-00	CONNECTOR (RECEPTACLE)			
CN501♣	1-560-124-00	PLUG, CONNECTOR (2.5MM) 4P			
CN502♣	1-564-250-00	PIN, CONNECTOR 15P			
CN503♣	1-564-259-00	PLUG, CONNECTOR (2.5MM) 13P			
CN505F	1-561-368-00	SOCKET, DIN 8P			
CN515	1-562-299-00	CONNECTOR (RECEPTACLE)			
CN601♣	1-564-250-00	PIN, CONNECTOR 15P			
CN602♣	1-564-249-00	PIN, CONNECTOR 14P			
CN603♣	1-560-125-00	PLUG, CONNECTOR (2.5MM) 5P			
CN604♣	1-560-124-00	PLUG, CONNECTOR (2.5MM) 4P			
CN615	1-562-299-00	CONNECTOR (RECEPTACLE)			
CN701♣	1-564-248-00	PIN, CONNECTOR 12P			
CN702♣	1-564-249-00	PIN, CONNECTOR 14P			
CN703♣	1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P			
CN715	1-562-299-00	CONNECTOR (RECEPTACLE)			
CN801♣	1-560-128-00	PLUG, CONNECTOR (2.5MM PITCH)			
CN802♣	1-560-126-00	PLUG, CONNECTOR (2.5MM) 6P			
CN803♣	1-560-124-00	PLUG, CONNECTOR (2.5MM) 4P			

ELECTRICAL PARTS

Ref.No.	Part No.	Description
CN804♣	1-560-124-00	PLUG, CONNECTOR (2.5MM) 4P
CN805♣	1-564-248-00	PIN, CONNECTOR 12P
CN815	1-562-299-00	CONNECTOR (RECEPTACLE)
CN901♣	1-560-224-00	PLUG, CONNECTOR (2.5MM) 10P
CN902♣	1-564-253-00	PLUG, CONNECTOR 20P
CN903♣	1-564-253-00	PLUG, CONNECTOR 20P
CN904♣	1-560-128-00	PLUG, CONNECTOR (2.5MM PITCH)
CN905⚠	1-561-326-00	(AEP,UK)...CONNECTOR, POWER; 2P
CN905⚠	1-509-547-00	(US,Canadian)...3P INLET
CN906	1-507-866-00	JACK, DC POWER
CNJ601	1-507-657-00	JACK
D1	1-806-660-00	DIODE ESAB85-009
D2	8-719-100-46	DIODE RD7.5E-B3
D3	8-719-923-48	DIODE 1S2348H
D4	8-719-923-48	DIODE 1S2348H
D5	8-719-906-38	DIODE ERB44-02
D6	8-719-906-38	DIODE ERB44-02
D7	8-719-906-38	DIODE ERB44-02
D8	8-719-906-38	DIODE ERB44-02
D9	8-719-907-24	DIODE ESAC31-02D
D10	8-719-907-24	DIODE ESAC31-02D
D11	8-719-100-36	DIODE RD5.6EB3
D101	8-719-100-43	DIODE RD7.5EB1
D102	8-719-100-43	DIODE RD7.5EB1
D103	8-719-100-43	DIODE RD7.5EB1
D104	8-719-100-43	DIODE RD7.5EB1
D105	8-719-815-55	DIODE 1S1555
D106	8-719-812-41	DIODE TLR124
D201	8-719-100-43	DIODE RD7.5EB1
D202	8-719-100-43	DIODE RD7.5EB1
D203	8-719-100-43	DIODE RD7.5EB1
D204	8-719-100-43	DIODE RD7.5EB1
D205	8-719-815-55	DIODE 1S1555
D206	8-719-812-41	DIODE TLR124
D301	8-719-815-55	DIODE 1S1555
D302	8-719-815-55	DIODE 1S1555
D303	8-719-815-55	DIODE 1S1555
D304	8-719-815-55	DIODE 1S1555
D305	8-719-815-55	DIODE 1S1555
D306	8-719-815-55	DIODE 1S1555
D307	8-719-815-55	DIODE 1S1555
D308	8-719-815-55	DIODE 1S1555
D309	8-719-815-55	DIODE 1S1555
D310	8-719-815-55	DIODE 1S1555

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MF:μF, PF:μμF.

RESISTORS
- All resistors are in ohms.
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- MMH : mH, UH : μH

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In each case, U : μ, for example:
UA···: μA···, UPA···: μPA···, UPC···: μPC, UPD···: μPD···

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ELECTRICAL PARTS

Ref.No.	Part No.	Description
D311	8-719-815-55	DIODE 1S1555
D312	8-719-815-55	DIODE 1S1555
D313	8-719-815-55	DIODE 1S1555
D314	8-719-815-55	DIODE 1S1555
D315	8-719-815-55	DIODE 1S1555
D316	8-719-815-55	DIODE 1S1555
D317	8-719-100-43	DIODE RD7.5EB1
D318	8-719-815-55	DIODE 1S1555
D319	8-719-815-55	DIODE 1S1555
D601	8-719-815-55	DIODE 1S1555
D602	8-719-815-55	DIODE 1S1555
D603	8-719-815-55	DIODE 1S1555
D604	8-719-815-55	DIODE 1S1555
D701	8-719-815-55	DIODE 1S1555
D702	8-719-815-55	DIODE 1S1555
D901	8-719-200-02	DIODE 10E-2
D902	8-719-200-02	DIODE 10E-2
D903	8-719-200-02	DIODE 10E-2
D904	8-719-911-55	DIODE U05G
D905	1-806-650-11	DIODE (LED BLOCK)
	8-719-812-41	DIODE TLR124(RED)
	8-719-812-43	DIODE TLG124(GREEN)
D906	1-806-650-11	DIODE (LED BLOCK)
	8-719-812-41	DIODE TLR124(RED)
	8-719-812-43	DIODE TLG124(GREEN)
D907	⚠ 8-719-504-10	DIODE S4VB10
D908	8-719-812-41	DIODE TLR124
D909	8-719-812-41	DIODE TLR124
F101	⚠ 1-532-704-00	(US:SERIAL No.820101 AND LATER, Canadian:SERIAL No.730001 AND LATER)..FUSE,5A
F101	⚠ 1-532-299-00	(AEP-SERIAL No.540101 AND LATER).FUSE,5A
F101	⚠ 1-532-299-00	(UK:SERIAL No.660001 AND LATER)..FUSE,5A
F102	⚠ 1-532-704-00	(US:SERIAL No.820101 AND LATER, Canadian:SERIAL No.730001 AND LATER)..FUSE,5A
F102	⚠ 1-532-299-00	(AEP:SERIAL No.540101 AND LATER).FUSE,5A
F102	⚠ 1-532-299-00	(UK:SERIAL No.660001 AND LATER)..FUSE,5A
IC1	8-759-937-59	IC MB3759
IC101	8-759-745-61	IC NJM4560D-D
IC102	8-759-745-60	IC NJM4560D
IC103	8-759-745-60	IC NJM4560D
IC201	8-759-745-61	IC NJM4560D-D
IC202	8-759-745-60	IC NJM4560D
IC203	8-759-745-60	IC NJM4560D
IC301	8-759-745-60	IC NJM4560D
IC302	8-759-745-60	IC NJM4560D

ELECTRICAL PARTS

Ref.No.	Part No.	Description
IC303	8-759-745-60	IC NJM4560D
IC304	8-759-745-60	IC NJM4560D
IC305	8-759-745-60	IC NJM4560D
IC306	8-759-745-60	IC NJM4560D
IC307	8-759-745-60	IC NJM4560D
IC308	8-759-745-60	IC NJM4560D
IC309	8-759-745-60	IC NJM4560D
IC310	8-759-745-60	IC NJM4560D
IC311	8-759-745-60	IC NJM4560D
IC312	8-759-745-60	IC NJM4560D
IC313	8-759-745-60	IC NJM4560D
IC501	8-759-745-60	IC NJM4560D
IC601	8-759-745-60	IC NJM4560D
IC701	8-759-745-60	IC NJM4560D
IC702	8-759-745-60	IC NJM4560D
IC703	8-759-307-70	IC CX-770A
IC801	8-759-745-60	IC NJM4560D
IC802	8-759-745-60	IC NJM4560D
IC803	8-759-307-70	IC CX-770A
IC901	8-759-993-51	IC MSL9351RS
IC902	8-759-993-51	IC MSL9351RS
J101	1-507-867-00	JACK, PIN 8P
J102	1-507-868-00	JACK, PIN 16P
L1	1-421-495-00	COIL, CHOKE
L2	1-421-491-00	COIL, CHOKE
L3	1-421-588-00	COIL, CHOKE
L4	1-421-491-00	COIL, CHOKE
L5	1-421-462-00	COIL, CHOKE
L6	1-421-461-00	COIL, CHOKE
L7	1-421-461-00	COIL, CHOKE
L8	1-421-461-00	COIL, CHOKE
L9	1-421-461-00	COIL, CHOKE
MIC1	8-814-189-00	MICROPHONE, BUILT-IN (C-1007A)
PT101	⚠ 1-447-574-00	(US,Canadian)...TRANSFORMER, POWER
PT101	⚠ 1-447-575-00	(AEP,UK).....TRANSFORMER, POWER
Q1	1-806-219-11	TRANSISTOR 2SA1012-Y
Q2	8-729-108-59	TRANSISTOR 2SC2785F
Q3	8-729-117-54	TRANSISTOR 2SA1175-F
Q4	1-806-258-11	TRANSISTOR 2SD1049
Q5	1-806-258-11	TRANSISTOR 2SD1049
Q6	8-729-133-43	TRANSISTOR 2SC2334-K
Q7	8-729-133-43	TRANSISTOR 2SC2334-K
Q8	1-806-219-11	TRANSISTOR 2SA1012-Y
Q101	8-765-493-00	TRANSISTOR 2SC2014

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ELECTRICAL PARTS

Ref.No.	Part No.	Description
Q102	8-729-493-00	TRANSISTOR 2SC2014
Q103	8-729-307-58	TRANSISTOR 2SC1775A
Q104	8-729-387-28	TRANSISTOR 2SA872-E
Q105	8-729-663-47	TRANSISTOR 2SC1364
Q201	8-765-493-00	TRANSISTOR 2SC2014
Q202	8-765-493-00	TRANSISTOR 2SC2014
Q203	8-729-307-58	TRANSISTOR 2SC1775A
Q204	8-729-387-28	TRANSISTOR 2SA872-E
Q205	8-729-663-47	TRANSISTOR 2SC1364
Q301	8-729-312-12	TRANSISTOR 2SC1213A
Q302	8-729-306-72	TRANSISTOR 2SD667A
Q303	8-729-364-72	TRANSISTOR 2SB647
Q304	8-729-306-72	TRANSISTOR 2SD667A
Q305	8-729-364-72	TRANSISTOR 2SB647
Q306	8-729-312-12	TRANSISTOR 2SC1213A
Q307	8-729-306-72	TRANSISTOR 2SD667A
Q308	8-729-364-72	TRANSISTOR 2SB647
Q309	8-729-306-72	TRANSISTOR 2SD667A
Q310	8-729-364-72	TRANSISTOR 2SB647
Q311	8-729-312-12	TRANSISTOR 2SC1213A
Q312	8-729-312-12	TRANSISTOR 2SC1213A
Q313	8-729-195-23	TRANSISTOR 2SA952
Q601	8-729-141-43	TRANSISTOR 2SD414
Q602	8-729-154-82	TRANSISTOR 2SB548
Q603	8-729-141-43	TRANSISTOR 2SD414
Q604	8-729-154-82	TRANSISTOR 2SB548
Q701	8-729-195-23	TRANSISTOR 2SA952
Q702	8-729-663-47	TRANSISTOR 2SC1364
Q801	8-729-195-23	TRANSISTOR 2SA952
Q802	8-729-663-47	TRANSISTOR 2SC1364
Q803	8-729-312-12	TRANSISTOR 2SC1213A
Q804	8-729-312-12	TRANSISTOR 2SC1213A
Q901	8-729-195-23	TRANSISTOR 2SA952
Q902	8-729-195-23	TRANSISTOR 2SA952
Q903	8-729-195-23	TRANSISTOR 2SA952
Q904	8-729-195-23	TRANSISTOR 2SA952
Q905	8-729-195-23	TRANSISTOR 2SA952
Q906	8-729-195-23	TRANSISTOR 2SA952
Q907	8-729-195-23	TRANSISTOR 2SA952
Q908	8-729-195-23	TRANSISTOR 2SA952
R1	1-246-462-00	CARBON 360 5% 1/4W
R2	1-247-179-00	CARBON 100K 5% 1/4W
R3	1-247-171-00	CARBON 47K 5% 1/4W
R4	1-247-141-00	CARBON 2.7K 5% 1/4W
R5	1-247-147-00	CARBON 4.7K 5% 1/4W
R6	1-247-141-00	CARBON 2.7K 5% 1/4W

ELECTRICAL PARTS

Ref.No.	Part No.	Description
R7	1-246-457-00	CARBON 220 5% 1/4W
R8 ⚠	1-206-705-00	METAL OXIDE 150 5% 3W F
R9	1-247-147-00	CARBON 4.7K 5% 1/4W
R10	1-247-147-00	CARBON 4.7K 5% 1/4W
R11	1-247-155-00	CARBON 10K 5% 1/4W
R12	1-247-155-00	CARBON 10K 5% 1/4W
R13	1-246-433-00	CARBON 22 5% 1/4W
R14	1-246-473-00	CARBON 1K 5% 1/4W (US).....SERIAL No. UP TO 820100 (Canadian)...SERIAL No. UP TO 730000 (UK).....SERIAL No. UP TO 660000
R14 ⚠	1-212-895-00	(US).....SERIAL No.820101 AND LATER (Canadian)...SERIAL No.730001 AND LATER (AEP).....ALL (UK).....SERIAL No.660001 AND LATER FUSIBLE 390 5% 1/4W
R15	1-246-449-00	CARBON 100 5% 1/4W (US).....SERIAL No. UP TO 820100 (Canadian)...SERIAL No. UP TO 730000 (UK).....SERIAL No. UP TO 660000
R15 ⚠	1-211-614-00	(US).....SERIAL No.820101 AND LATER (Canadian)...SERIAL No.730001 AND LATER (AEP).....ALL (UK).....SERIAL No.660001 AND LATER NONFLAMMABLE 100 5% 1/2W
R16	1-246-525-00	CARBON 150K 5% 1/4W
R17	1-246-483-00	CARBON 2.7K 5% 1/4W
R18	1-226-771-00	RES, ADJ, METAL GLAZE 1K
R19	1-246-480-00	CARBON 2K 5% 1/4W
R20	1-246-448-00	CARBON 91 5% 1/4W (US).....SERIAL No. UP TO 820100 (Canadian)...SERIAL No. UP TO 730000 (UK).....SERIAL No. UP TO 660000
R20 ⚠	1-212-880-00	(US).....SERIAL No.820101 AND LATER (Canadian)...SERIAL No.730001 AND LATER (AEP).....ALL (UK).....SERIAL No.660001 AND LATER FUSIBLE 91 5% 1/4W
R21	1-246-449-00	CARBON 100 5% 1/4W (US).....SERIAL No. UP TO 820100 (Canadian)...SERIAL No. UP TO 730000 (UK).....SERIAL No. UP TO 660000
R21 ⚠	1-211-614-00	(US).....SERIAL No.820101 AND LATER (Canadian)...SERIAL No.730001 AND LATER (AEP).....ALL (UK).....SERIAL No.660001 AND LATER NONFLAMMABLE 100 5% 1/2W

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Ref.No.	Part No.	Description			
R22	1-246-449-00	CARBON	100	5%	1/4W
		(US).....SERIAL No. UP TO 820100			
		(Canadian)...SERIAL No. UP TO 730000			
		(UK).....SERIAL No. UP TO 660000			
R22 ⚠	1-212-881-00	(US).....SERIAL No.820101 AND LATER			
		(Canadian)...SERIAL No.730001 AND LATER			
		(AEP).....ALL			
		(UK).....SERIAL No.660001 AND LATER			
		FUSIBLE	100	5%	1/4W
R23	1-246-449-00	CARBON	100	5%	1/4W
		(US).....SERIAL No. UP TO 820100			
		(Canadian)...SERIAL No. UP TO 730000			
		(UK).....SERIAL No. UP TO 660000			
R23 ⚠	1-211-614-00	(US).....SERIAL No.820101 AND LATER			
		(Canadian)...SERIAL No.730001 AND LATER			
		(AEP).....ALL			
		(UK).....SERIAL No.660001 AND LATER			
		NONFLAMMABLE	100	5%	1/2W
R24	1-247-872-00	CARBON	51K	5%	1/6W
R25	1-247-872-00	CARBON	51K	5%	1/6W
R26	1-217-625-00	RES, METAL PLATE 0.05			
R101	1-246-493-00	CARBON	6.8K	1%	1/4W
R102	1-246-493-00	CARBON	6.8K	1%	1/4W
R103	1-246-521-00	CARBON	100K	5%	1/4W
R104	1-246-521-00	CARBON	100K	5%	1/4W
R105	1-246-433-00	CARBON	22	5%	1/4W
R106	1-246-433-00	CARBON	22	5%	1/4W
R108	1-246-497-00	CARBON	10K	5%	1/4W
R109	1-246-497-00	CARBON	10K	1%	1/4W
R110	1-246-497-00	CARBON	10K	1%	1/4W
R111	1-246-449-00	CARBON	100	5%	1/4W
R112	1-246-451-00	CARBON	120	5%	1/4W
R113	1-246-504-00	CARBON	20K	1%	1/4W
R114	1-246-504-00	CARBON	20K	1%	1/4W
R115	1-246-501-00	CARBON	15K	1%	1/4W
R116	1-246-501-00	CARBON	15K	1%	1/4W
R117	1-246-521-00	CARBON	100K	5%	1/4W
R118 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R119 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R120	1-246-521-00	CARBON	100K	5%	1/4W
R121	1-246-521-00	CARBON	100K	5%	1/4W
R122	1-246-466-00	CARBON	510	5%	1/4W
R123	1-246-529-00	CARBON	220K	1%	1/4W
R124	1-246-503-00	CARBON	18K	1%	1/4W
R125	1-246-537-00	CARBON	470K	5%	1/4W
R126	1-246-465-00	CARBON	470	5%	1/4W
R127	1-246-521-00	CARBON	100K	5%	1/4W
R128	1-246-521-00	CARBON	100K	5%	1/4W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R129	1-246-521-00	CARBON	100K	5%	1/4W
R130	1-246-528-00	CARBON	200K	5%	1/4W
R131	1-246-497-00	CARBON	10K	5%	1/4W
R132	1-246-497-00	CARBON	10K	5%	1/4W
R133	1-246-521-00	CARBON	100K	5%	1/4W
R134	1-246-521-00	CARBON	100K	5%	1/4W
R135	1-246-497-00	CARBON	10K	5%	1/4W
R136	1-246-528-00	CARBON	200K	5%	1/4W
R137	1-246-497-00	CARBON	10K	5%	1/4W
R138	1-246-480-00	CARBON	2K	5%	1/4W
R139	1-246-480-00	CARBON	2K	5%	1/4W
R140	1-246-537-00	CARBON	470K	5%	1/4W
R141	1-246-537-00	CARBON	470K	5%	1/4W
R142	1-246-480-00	CARBON	2K	5%	1/4W
R143	1-246-475-00	CARBON	1.2K	5%	1/4W
R144	1-246-449-00	CARBON	100	5%	1/4W
R145	1-246-525-00	CARBON	150K	5%	1/4W
R146	1-246-480-00	CARBON	2K	5%	1/4W
R147	1-246-449-00	CARBON	100	5%	1/4W
R148	1-246-533-00	CARBON	330K	5%	1/4W
R149	1-246-521-00	CARBON	100K	5%	1/4W
R150	1-246-473-00	CARBON	1K	5%	1/4W
R151	1-246-489-00	CARBON	4.7K	5%	1/4W
R152	1-246-497-00	CARBON	10K	5%	1/4W
R153	1-246-476-00	CARBON	1.3K	5%	1/4W
R154	1-246-476-00	CARBON	1.3K	5%	1/4W
R155	1-246-501-00	CARBON	15K	5%	1/4W
R156	1-246-501-00	CARBON	15K	5%	1/4W
R157	1-246-501-00	CARBON	15K	5%	1/4W
R158	1-246-501-00	CARBON	15K	5%	1/4W
R159	1-246-497-00	CARBON	10K	5%	1/4W
R160 ⚠	1-212-865-00	FUSIBLE	22	5%	1/4W
R161 ⚠	1-212-865-00	FISIBLE	22	5%	1/4W
R162	1-246-497-00	CARBON	10K	5%	1/4W
R163	1-246-481-00	CARBON	2.2K	5%	1/4W
R164	1-246-484-00	CARBON	3K	5%	1/4W
R165	1-246-449-00	CARBON	100	5%	1/4W
		(US).....SERIAL No. UP TO 820100			
		(Canadian)...SERIAL No. UP TO 730000			
		(AEP).....SERIAL No. UP TO 540100			
		(UK).....SERIAL No. UP TO 660000			
R201	1-246-493-00	CARBON	6.8K	1%	1/4W
R202	1-246-493-00	CARBON	6.8K	1%	1/4W
R203	1-246-521-00	CARBON	100K	5%	1/4W
R204	1-246-521-00	CARBON	100K	5%	1/4W
R205	1-246-433-00	CARBON	22	5%	1/4W
R206	1-246-433-00	CARBON	22	5%	1/4W

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- All resistors are in ohms.
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- MMH : mH, UH : μH

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In each case, U : μ, for example:
UA···: μA···, UPA···: μPA···, UPC···: μPC, UPD···: μPD···

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ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R208	1-246-497-00	CARBON	10K	5%	1/4W
R209	1-246-497-00	CARBON	10K	1%	1/4W
R210	1-246-497-00	CARBON	10K	1%	1/4W
R211	1-246-449-00	CARBON	100	5%	1/4W
R212	1-246-451-00	CARBON	120	5%	1/4W
R213	1-246-504-00	CARBON	20K	1%	1/4W
R214	1-246-504-00	CARBON	20K	1%	1/4W
R215	1-246-501-00	CARBON	15K	1%	1/4W
R216	1-246-501-00	CARBON	15K	1%	1/4W
R217	1-246-521-00	CARBON	100K	5%	1/4W
R218 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R219 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R220	1-246-521-00	CARBON	100K	5%	1/4W
R221	1-246-521-00	CARBON	100K	5%	1/4W
R222	1-246-466-00	CARBON	510	5%	1/4W
R223	1-246-521-00	CARBON	100K	5%	1/4W
R224	1-246-521-00	CARBON	100K	5%	1/4W
R225	1-246-521-00	CARBON	100K	5%	1/4W
R226	1-246-528-00	CARBON	200K	5%	1/4W
R227	1-246-497-00	CARBON	10K	5%	1/4W
R228	1-246-497-00	CARBON	10K	5%	1/4W
R229	1-246-521-00	CARBON	100K	5%	1/4W
R230	1-246-521-00	CARBON	100K	5%	1/4W
R231	1-246-497-00	CARBON	10K	5%	1/4W
R232	1-246-528-00	CARBON	200K	5%	1/4W
R233	1-246-497-00	CARBON	10K	5%	1/4W
R234	1-246-480-00	CARBON	2K	5%	1/4W
R235	1-246-480-00	CARBON	2K	5%	1/4W
R236	1-246-537-00	CARBON	470K	5%	1/4W
R237	1-246-537-00	CARBON	470K	5%	1/4W
R238	1-246-480-00	CARBON	2K	5%	1/4W
R239	1-246-480-00	CARBON	2K	5%	1/4W
R240	1-246-449-00	CARBON	100	5%	1/4W
R241	1-246-525-00	CARBON	150K	5%	1/4W
R242	1-246-480-00	CARBON	2K	5%	1/4W
R243	1-246-449-00	CARBON	100	5%	1/4W
R244	1-246-533-00	CARBON	330K	5%	1/4W
R245	1-246-521-00	CARBON	100K	5%	1/4W
R246	1-246-473-00	CARBON	1K	5%	1/4W
R247	1-246-489-00	CARBON	4.7K	5%	1/4W
R248	1-246-497-00	CARBON	10K	5%	1/4W
R249	1-246-476-00	CARBON	1.3K	5%	1/4W
R250	1-246-476-00	CARBON	1.3K	5%	1/4W
R251	1-246-501-00	CARBON	15K	5%	1/4W
R252	1-246-501-00	CARBON	15K	5%	1/4W
R253	1-246-501-00	CARBON	15K	5%	1/4W
R254	1-246-501-00	CARBON	15K	5%	1/4W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R255	1-246-497-00	CARBON	10K	5%	1/4W
R256 ⚠	1-212-865-00	FUSIBLE	22	5%	1/4W
R257 ⚠	1-212-865-00	FUSIBLE	22	5%	1/4W
R258	1-246-497-00	CARBON	10K	5%	1/4W
R259	1-246-481-00	CARBON	2.2K	5%	1/4W
R260	1-246-484-00	CARBON	3K	5%	1/4W
R261	1-246-449-00	CARBON	100	5%	1/4W
		(US).....SERIAL No. UP TO 820100			
		(Canadian)...SERIAL No. UP TO 730000			
		(AEP).....SERIAL No. UP TO 540100			
		(UK).....SERIAL No. UP TO 660000			
R301	1-246-505-00	CARBON	22K	5%	1/4W
R302	1-246-497-00	CARBON	10K	5%	1/4W
R303	1-246-497-00	CARBON	10K	5%	1/4W
R304	1-246-505-00	CARBON	22K	5%	1/4W
R305	1-246-497-00	CARBON	10K	5%	1/4W
R306	1-246-497-00	CARBON	10K	5%	1/4W
R307	1-246-514-00	CARBON	51K	5%	1/4W
R308	1-246-497-00	CARBON	10K	5%	1/4W
R309	1-246-497-00	CARBON	10K	5%	1/4W
R310	1-246-514-00	CARBON	51K	5%	1/4W
R311	1-246-497-00	CARBON	10K	5%	1/4W
R312	1-246-497-00	CARBON	10K	5%	1/4W
R313	1-246-497-00	CARBON	10K	5%	1/4W
R314	1-246-503-00	CARBON	18K	5%	1/4W
R315	1-246-497-00	CARBON	10K	5%	1/4W
R316	1-246-497-00	CARBON	10K	5%	1/4W
R317	1-246-521-00	CARBON	100K	5%	1/4W
R318 ⚠	1-246-865-00	FUSIBLE	22	5%	1/4W
R319 ⚠	1-212-865-00	FUSIBLE	22	5%	1/4W
R320	1-246-441-00	CARBON	47	5%	1/4W
R321	1-246-441-00	CARBON	47	5%	1/4W
R322	1-246-441-00	CARBON	47	5%	1/4W
R323	1-246-441-00	CARBON	47	5%	1/4W
R324	1-246-441-00	CARBON	47	5%	1/4W
R325	1-246-473-00	CARBON	1K	5%	1/4W
R326	1-246-521-00	CARBON	100K	5%	1/4W
R327	1-246-473-00	CARBON	1K	5%	1/4W
R328	1-246-504-00	CARBON	20K	5%	1/4W
R329	1-246-462-00	CARBON	360	5%	1/4W
R330	1-246-488-00	CARBON	4.3K	5%	1/4W
R331	1-246-497-00	CARBON	10K	5%	1/4W
R332	1-246-497-00	CARBON	10K	5%	1/4W
R333 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R334 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R335	1-246-497-00	CARBON	10K	5%	1/4W
R336	1-246-497-00	CARBON	10K	5%	1/4W

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- All resistors are in ohms.
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ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R337	1-246-497-00	CARBON	10K	5%	1/4W
R338	1-246-497-00	CARBON	10K	5%	1/4W
R339	1-246-425-00	CARBON	10	5%	1/4W
R340	1-246-425-00	CARBON	10	5%	1/4W
R341	1-246-497-00	CARBON	10K	5%	1/4W
R342	1-246-446-00	CARBON	75	5%	1/4W
R343	1-246-497-00	CARBON	10K	5%	1/4W
R344	1-246-497-00	CARBON	10K	5%	1/4W
R345	1-246-497-00	CARBON	10K	5%	1/4W
R346	1-246-497-00	CARBON	10K	5%	1/4W
R347	1-246-497-00	CARBON	10K	5%	1/4W
R348	1-246-425-00	CARBON	10	5%	1/4W
R349	1-246-425-00	CARBON	10	5%	1/4W
R350	1-246-497-00	CARBON	10K	5%	1/4W
R351	1-246-446-00	CARBON	75	5%	1/4W
R352	1-246-497-00	CARBON	10K	5%	1/4W
R353	1-246-498-00	CARBON	11K	5%	1/4W
R354	1-246-487-00	CARBON	3.9K	5%	1/4W
R355	1-246-498-00	CARBON	11K	5%	1/4W
R356	1-246-487-00	CARBON	3.9K	5%	1/4W
R357	1-246-521-00	CARBON	100K	5%	1/4W
R358	1-246-449-00	CARBON	100	5%	1/4W
R359	1-246-521-00	CARBON	100K	5%	1/4W
R360	1-246-497-00	CARBON	10K	5%	1/4W
R361	1-246-518-00	CARBON	75K	5%	1/4W
R362	1-246-497-00	CARBON	10K	5%	1/4W
R363	1-246-473-00	CARBON	1K	5%	1/4W
R364 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R365 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R366	1-246-473-00	CARBON	1K	5%	1/4W
R367	1-246-521-00	CARBON	100K	5%	1/4W
R368	1-246-473-00	CARBON	1K	5%	1/4W
R369	1-246-504-00	CARBON	20K	5%	1/4W
R370	1-246-462-00	CARBON	360	5%	1/4W
R371	1-246-488-00	CARBON	4.3K	5%	1/4W
R372	1-246-497-00	CARBON	10K	5%	1/4W
R373	1-246-497-00	CARBON	10K	5%	1/4W
R374 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R375 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R376	1-246-497-00	CARBON	10K	5%	1/4W
R377	1-246-497-00	CARBON	10K	5%	1/4W
R378	1-246-497-00	CARBON	10K	5%	1/4W
R379	1-246-497-00	CARBON	10K	5%	1/4W
R380	1-246-425-00	CARBON	10	5%	1/4W
R381	1-246-425-00	CARBON	10	5%	1/4W
R382	1-246-497-00	CARBON	10K	5%	1/4W
R383	1-246-446-00	CARBON	75	5%	1/4W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R384	1-246-497-00	CARBON	10K	5%	1/4W
R385	1-246-497-00	CARBON	10K	5%	1/4W
R386	1-246-497-00	CARBON	10K	5%	1/4W
R387	1-246-497-00	CARBON	10K	5%	1/4W
R388	1-246-497-00	CARBON	10K	5%	1/4W
R389	1-246-425-00	CARBON	10	5%	1/4W
R390	1-246-425-00	CARBON	10	5%	1/4W
R391	1-246-497-00	CARBON	10K	5%	1/4W
R392	1-246-446-00	CARBON	75	5%	1/4W
R393	1-246-497-00	CARBON	10K	5%	1/4W
R394	1-246-498-00	CARBON	11K	5%	1/4W
R395	1-246-487-00	CARBON	3.9K	5%	1/4W
R396	1-246-498-00	CARBON	11K	5%	1/4W
R397	1-246-487-00	CARBON	3.9K	5%	1/4W
R398	1-246-521-00	CARBON	100K	5%	1/4W
R399	1-246-449-00	CARBON	100	5%	1/4W
R400	1-246-521-00	CARBON	100K	5%	1/4W
R401	1-246-497-00	CARBON	10K	5%	1/4W
R402	1-246-518-00	CARBON	75K	5%	1/4W
R403	1-246-497-00	CARBON	10K	5%	1/4W
R404	1-246-473-00	CARBON	1K	5%	1/4W
R405 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R406 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R407	1-246-473-00	CARBON	1K	5%	1/4W
R408	1-246-521-00	CARBON	100K	5%	1/4W
R409	1-246-473-00	CARBON	1K	5%	1/4W
R410	1-246-504-00	CARBON	20K	5%	1/4W
R411	1-246-469-00	CARBON	680	5%	1/4W
R412	1-246-488-00	CARBON	4.3K	5%	1/4W
R413	1-246-521-00	CARBON	100K	5%	1/4W
R414	1-246-449-00	CARBON	100	5%	1/4W
R415	1-246-521-00	CARBON	100K	5%	1/4W
R416	1-246-497-00	CARBON	10K	5%	1/4W
R417	1-246-518-00	CARBON	75K	5%	1/4W
R418	1-246-497-00	CARBON	10K	5%	1/4W
R419	1-246-473-00	CARBON	1K	5%	1/4W
R420 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R421 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R422	1-246-473-00	CARBON	1K	5%	1/4W
R423	1-246-521-00	CARBON	100K	5%	1/4W
R424	1-246-473-00	CARBON	1K	5%	1/4W
R425	1-246-504-00	CARBON	20K	5%	1/4W
R426	1-246-469-00	CARBON	680	5%	1/4W
R427	1-246-488-00	CARBON	4.3K	5%	1/4W
R428	1-246-521-00	CARBON	100K	5%	1/4W

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ELECTRICAL PARTS

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R429	1-246-449-00	CARBON	100	5%	1/4W
R430	1-246-521-00	CARBON	100K	5%	1/4W
R431	1-246-497-00	CARBON	10K	5%	1/4W
R432	1-246-518-00	CARBON	75K	5%	1/4W
R433	1-246-497-00	CARBON	10K	5%	1/4W
R434	1-246-473-00	CARBON	1K	5%	1/4W
R435 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R436 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R437	1-246-489-00	CARBON	4.7K	5%	1/4W
R438	1-246-513-00	CARBON	47K	5%	1/4W
R439	1-246-509-00	CARBON	33K	5%	1/4W
R440	1-246-529-00	CARBON	220K	5%	1/4W
R441 ⚠	1-206-673-00	METAL OXIDE	2.4K	5%	2W F
R442 ⚠	1-212-865-00	FUSIBLE	22	5%	1/4W
R443 ⚠	1-212-865-00	FUSIBLE	22	5%	1/4W
R501	1-246-521-00	CARBON	100K	5%	1/4W
R502	1-246-473-00	CARBON	1K	5%	1/4W
R503	1-246-476-00	CARBON	1.3K	5%	1/4W
R504	1-246-497-00	CARBON	10K	5%	1/4W
R506	1-246-476-00	CARBON	1.3K	5%	1/4W
R507	1-246-501-00	CARBON	15K	5%	1/4W
R508	1-246-501-00	CARBON	15K	5%	1/4W
R509	1-246-521-00	CARBON	100K	5%	1/4W
R510	1-246-473-00	CARBON	1K	5%	1/4W
R511	1-246-489-00	CARBON	4.7K	5%	1/4W
R512	1-246-497-00	CARBON	10K	5%	1/4W
R513	1-246-476-00	CARBON	1.3K	5%	1/4W
R514	1-246-476-00	CARBON	1.3K	5%	1/4W
R515	1-246-501-00	CARBON	15K	5%	1/4W
R516	1-246-501-00	CARBON	15K	5%	1/4W
R517 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R518 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R519	1-246-503-00	CARBON	18K	5%	1/4W
R520	1-246-505-00	CARBON	22K	5%	1/4W
R521	1-246-505-00	CARBON	22K	5%	1/4W
R522	1-246-514-00	CARBON	51K	5%	1/4W
R523	1-246-514-00	CARBON	51K	5%	1/4W
R601	1-246-510-00	CARBON	36K	5%	1/4W
R602	1-246-510-00	CARBON	36K	5%	1/4W
R603	1-246-519-00	CARBON	82K	5%	1/4W
R604	1-246-519-00	CARBON	82K	5%	1/4W
R605	1-246-449-00	CARBON	100	5%	1/4W
R606	1-246-521-00	CARBON	100K	5%	1/4W
R607	1-246-473-00	CARBON	1K	5%	1/4W
R608	1-246-483-00	CARBON	2.7K	5%	1/4W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R609	1-246-510-00	CARBON	36K	5%	1/4W
R610	1-246-488-00	CARBON	4.3K	5%	1/4W
R611	1-246-488-00	CARBON	4.3K	5%	1/4W
R612	1-246-425-00	CARBON	10	5%	1/4W
R613	1-246-425-00	CARBON	10	5%	1/4W
R614	1-246-497-00	CARBON	10K	5%	1/4W
R615	1-244-842-00	CARBON	51	5%	1/2W
R616 ⚠	1-212-865-00	FUSIBLE	22	5%	1/4W
R617 ⚠	1-212-865-00	FUSIBLE	22	5%	1/4W
R618	1-246-521-00	CARBON	100K	5%	1/4W
R619	1-246-473-00	CARBON	1K	5%	1/4W
R620	1-246-483-00	CARBON	2.7K	5%	1/4W
R621	1-246-510-00	CARBON	36K	5%	1/4W
R622	1-246-488-00	CARBON	4.3K	5%	1/4W
R623	1-246-488-00	CARBON	4.3K	5%	1/4W
R624	1-246-425-00	CARBON	10	5%	1/4W
R625	1-246-425-00	CARBON	10	5%	1/4W
R626	1-246-497-00	CARBON	10K	5%	1/4W
R627	1-244-842-00	CARBON	51	5%	1/2W
R628 ⚠	1-212-865-00	FUSIBLE	22	5%	1/4W
R629 ⚠	1-212-865-00	FUSIBLE	22	5%	1/4W
R630 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R631 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R632	1-246-473-00	CARBON	1K	5%	1/4W
R633	1-246-473-00	CARBON	1K	5%	1/4W
R701	1-246-504-00	CARBON	20K	5%	1/4W
R702	1-246-504-00	CARBON	20K	5%	1/4W
R703	1-246-501-00	CARBON	15K	5%	1/4W
R704	1-246-497-00	CARBON	10K	5%	1/4W
R705	1-246-497-00	CARBON	10K	5%	1/4W
R706	1-246-501-00	CARBON	15K	5%	1/4W
R707	1-246-526-00	CARBON	160K	5%	1/4W
R708	1-246-525-00	CARBON	150K	5%	1/4W
R709	1-246-525-00	CARBON	150K	5%	1/4W
R710	1-246-465-00	CARBON	8.2K	5%	1/4W
R711 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R712 ⚠	1-212-873-00	FUSIBLE	47	5%	1/4W
R713	1-246-479-00	CARBON	1.8K	5%	1/4W
R714	1-246-521-00	CARBON	100K	5%	1/4W
R715	1-246-471-00	CARBON	820	5%	1/4W
R716	1-246-519-00	CARBON	82K	5%	1/4W
R717	1-246-484-00	CARBON	3K	5%	1/4W
R718	1-246-493-00	CARBON	6.8K	5%	1/4W
R719	1-246-521-00	CARBON	100K	5%	1/4W
R720	1-246-473-00	CARBON	1K	5%	1/4W

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MF:μF, PF:μμF.

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ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R721	1-246-473-00	CARBON	1K	5%	1/4W
R722	1-246-496-00	CARBON	9.1K	5%	1/4W
R723	1-246-521-00	CARBON	100K	5%	1/4W
R724	⚠1-212-873-00	FUSIBLE	47	5%	1/4W
R725	⚠1-212-873-00	FUSIBLE	47	5%	1/4W
R726	1-246-521-00	CARBON	100K	5%	1/4W
R727	1-246-521-00	CARBON	100K	5%	1/4W
R728	1-246-521-00	CARBON	100K	5%	1/4W
R729	1-246-521-00	CARBON	100K	5%	1/4W
R730	1-246-497-00	CARBON	10K	5%	1/4W
R801	1-246-521-00	CARBON	100K	5%	1/4W
R802	1-246-489-00	CARBON	4.7K	5%	1/4W
R803	1-246-489-00	CARBON	4.7K	5%	1/4W
R804	1-246-521-00	CARBON	100K	5%	1/4W
R805	1-246-521-00	CARBON	100K	5%	1/4W
R806	1-246-441-00	CARBON	47	5%	1/4W
R807	1-246-489-00	CARBON	4.7K	5%	1/4W
R808	1-246-521-00	CARBON	100K	5%	1/4W
R809	⚠1-212-873-00	FUSIBLE	47	5%	1/4W
R810	⚠1-212-873-00	FUSIBLE	47	5%	1/4W
R811	1-246-521-00	CARBON	100K	5%	1/4W
R812	1-246-521-00	CARBON	100K	5%	1/4W
R813	1-246-521-00	CARBON	100K	5%	1/4W
R814	1-246-521-00	CARBON	100K	5%	1/4W
R815	1-246-496-00	CARBON	9.1K	5%	1/4W
R816	1-246-496-00	CARBON	9.1K	5%	1/4W
R817	1-246-475-00	CARBON	1.2K	5%	1/4W
R818	1-246-475-00	CARBON	1.2K	5%	1/4W
R819	1-246-473-00	CARBON	1K	5%	1/4W
R820	1-246-504-00	CARBON	20K	5%	1/4W
R821	1-246-521-00	CARBON	100K	5%	1/4W
R822	1-246-473-00	CARBON	1K	5%	1/4W
R823	1-246-488-00	CARBON	4.3K	5%	1/4W
R824	1-246-497-00	CARBON	10K	5%	1/4W
R825	1-246-521-00	CARBON	100K	5%	1/4W
R826	1-246-449-00	CARBON	100	5%	1/4W
R827	1-246-473-00	CARBON	1K	5%	1/4W
R828	1-246-504-00	CARBON	20K	5%	1/4W
R829	1-246-521-00	CARBON	100K	5%	1/4W
R830	1-246-473-00	CARBON	1K	5%	1/4W
R831	1-246-488-00	CARBON	4.3K	5%	1/4W
R832	1-246-497-00	CARBON	10K	5%	1/4W
R833	1-246-521-00	CARBON	100K	5%	1/4W
R834	1-246-449-00	CARBON	100	5%	1/4W
R835	⚠1-212-873-00	FUSIBLE	47	5%	1/4W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R836	⚠1-212-873-00	FUSIBLE	47	5%	1/4W
R837	1-246-497-00	CARBON	10K	5%	1/4W
R901	1-246-445-00	CARBON	68	5%	1/4W
R902	1-246-445-00	CARBON	68	5%	1/4W
R903	1-246-445-00	CARBON	68	5%	1/4W
R904	1-246-445-00	CARBON	68	5%	1/4W
R905	1-246-445-00	CARBON	68	5%	1/4W
R906	1-246-445-00	CARBON	68	5%	1/4W
R907	1-246-445-00	CARBON	68	5%	1/4W
R908	1-246-445-00	CARBON	68	5%	1/4W
R909	1-246-465-00	CARBON	470	5%	1/4W
R910	1-246-465-00	CARBON	470	5%	1/4W
R911	1-246-465-00	CARBON	470	5%	1/4W
R912	1-246-465-00	CARBON	470	5%	1/4W
R913	1-246-499-00	CARBON	12K	5%	1/2W
R914	1-246-445-00	CARBON	68	5%	1/4W
R915	1-246-445-00	CARBON	68	5%	1/4W
R916	1-246-445-00	CARBON	68	5%	1/4W
R917	1-246-445-00	CARBON	68	5%	1/4W
R918	1-246-445-00	CARBON	68	5%	1/4W
R919	1-246-445-00	CARBON	68	5%	1/4W
R920	1-246-445-00	CARBON	68	5%	1/4W
R921	1-246-445-00	CARBON	68	5%	1/4W
R922	1-246-465-00	CARBON	470	5%	1/4W
R923	1-246-465-00	CARBON	470	5%	1/4W
R924	1-246-465-00	CARBON	470	5%	1/4W
R925	1-246-465-00	CARBON	470	5%	1/4W
R926	1-246-498-00	CARBON	12K	5%	1/4W
R927	1-244-879-00	CARBON	1.8K	5%	1/2W
R928	1-244-877-00	CARBON	1.5K	5%	1/2W
RV101	1-230-084-00	RES, VAR, CARBON 5K			
RV102	1-230-050-00	RES, VAR, CARBON 10K			
RV103	1-230-050-00	RES, VAR, CARBON 10K			
RV104	1-230-050-00	RES, VAR, CARBON 10K			
RV105	1-226-510-00	RES, VAR, CARBON 5K			
RV106	1-226-510-00	RES, VAR, CARBON 5K			
RV107	1-230-050-00	RES, VAR, CARBON 10K			
RV118	1-230-052-00	RES, VAR, SLIDE 5K			
RV201	1-230-084-00	RES, VAR, CARBON 5K			
RV202	1-230-050-00	RES, VAR, CARBON 10K			
RV203	1-230-050-00	RES, VAR, CARBON 10K			
RV204	1-230-050-00	RES, VAR, CARBON 10K			
RV205	1-226-510-00	RES, VAR, CARBON 5K			
RV206	1-226-510-00	RES, VAR, CARBON 5K			
RV207	1-230-050-00	RES, VAR, CARBON 10K			

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ELECTRICAL PARTS

Ref.No.	Part No.	Description
RV218	1-230-052-00	RES, VAR, SLIDE 5K
RV301	1-224-248-XX	RES, ADJ, SOLID 470
RV302	1-224-251-XX	RES, ADJ, SOLID 4.7K
RV303	1-224-248-XX	RES, ADJ, SOLID 470
RV304	1-224-251-XX	RES, ADJ, SOLID 4.7K
RV305	1-224-248-XX	RES, ADJ, SOLID 470
RV306	1-224-251-XX	RES, ADJ, SOLID 4.7K
RV307	1-224-248-XX	RES, ADJ, SOLID 470
RV308	1-224-251-XX	RES, ADJ, SOLID 4.7K
RV309	1-230-048-00	RES, VAR, SLIDE 5K/5K
RV318	1-230-049-00	RES, VAR, SLIDE 5K
RV418	1-230-049-00	RES, VAR, SLIDE 5K
RV501	1-230-085-00	RES, VAR, CARBON 10K
RV502	1-230-050-00	RES, VAR, CARBON 10K
RV503	1-230-085-00	RES, VAR, CARBON 10K
RV504	1-230-050-00	RES, VAR, CARBON 10K
RV518	1-230-052-00	RES, VAR, SLIDE 5K
RV618	1-230-052-00	RES, VAR, SLIDE 5K
RV701	1-230-085-00	RES, VAR, CARBON 10K
RV702	1-230-051-00	RES, VAR, CARBON 10K/10K
RV703	1-224-643-XX	RES, ADJ, CARBON 2.2K
RV718	1-230-052-00	RES, VAR, SLIDE 5K
RV801	1-230-051-00	RES, VAR, CARBON 10K/10K
RV802	1-224-645-XX	RES, ADJ, CARBON 10K
RV803	1-224-645-XX	RES, ADJ, CARBON 10K
RV818	1-230-052-00	RES, VAR, SLIDE 5K
RY901	1-515-459-00	RELAY
S101	1-552-947-00	SWITCH, ROTARY
S102	1-554-472-00	SWITCH, PUSH (1 KEY)
S103	1-554-472-00	SWITCH, PUSH (1 KEY)
S104	1-554-472-00	SWITCH, PUSH (1 KEY)
S105	1-554-474-00	SWITCH, PUSH (1 KEY)
S106	1-554-487-00	SWITCH, SLIDE
S201	1-552-692-00	SWITCH, ROTARY
S202	1-554-472-00	SWITCH, PUSH (1 KEY)
S203	1-554-472-00	SWITCH, PUSH (1 KEY)
S204	1-554-472-00	SWITCH, PUSH (1 KEY)
S205	1-554-474-00	SWITCH, PUSH (1 KEY)
S206	1-554-487-00	SWITCH, SLIDE
S306	1-554-487-00	SWITCH, SLIDE
S406	1-554-487-00	SWITCH, SLIDE
S506	1-554-487-00	SWITCH, SLIDE
S601	1-554-476-00	SWITCH, PUSH (4 KEY)
S606	1-554-487-00	SWITCH, SLIDE
S701	1-554-473-00	SWITCH, PUSH (1 KEY)

ELECTRICAL PARTS

Ref.No.	Part No.	Description
S706	1-554-487-00	SWITCH, SLIDE
S801	1-552-947-00	SWITCH, ROTARY
S802	1-554-475-00	SWITCH, PUSH (2 KEY)
S806	1-554-487-00	SWITCH, SLIDE
S901 ⚠	1-554-477-00	(US,Canadian)..SWITCH, PUSH (POWER)(2 KEY)
S901 ⚠	1-554-478-00	(AEP,UK)..SWITCH, PUSH (AC POWER)
S902 ⚠	1-553-028-00	(AEP,UK)..SWITCH, SLIDE (VOLTAGE SELECT)
SCR1	8-719-834-21	THYRISTOR SFOR3B42
T1	1-543-100-00	CORE
T2	1-543-100-00	CORE
T3	1-447-580-00	TRANSFORMER, DC-DC CONVERTER

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